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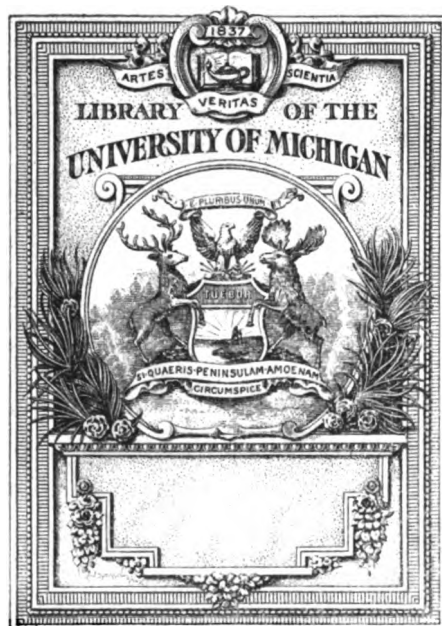
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The Relief of Pain

Denver Medical Times

Utah State Medical Society, Nevada
State Medical Association



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ORIGINAL COMMUNICATIONS.

IMPORTANCE OF SIMPLICITY IN ALL SURGICAL DETAIL.*

By JOSEPH PRICE, M.D.,

Philadelphia, Pa.

I am here to learn, not to teach! here not as a professor, but as a pupil. The title of this association designates the field of your surgery, the field has not been mine to any considerable extent; but in this connection I will not plead the extent of ignorance illustrated by the man who said he only knew two tunes, one was Old Hundred and the other wasn't.

You are experienced in your field; to be experienced is to know your subject and to be able to teach, otherwise not—except theoretically—and in practical and successful surgery, theory plays no very prominent part.

Railroad surgery, I take it, means something more than a free pass over the railroads. The pass we are pleased to regard as a species of diploma; a certificate that the holder has that scientific skill and experience which can repair those accidents to the individual which so repeatedly occur in railroad travel, and can give intelligent, honest and unbiased testimony in courts in those suits for damages by which railroad companies are often causelessly annoyed and not unfrequently mulcted to a degree offensive to principles of common justice. In this reckoning we pass over the loss of time and the vexation of the surgeon.

As I have indicated, my experience in the kind of surgery in which you are engaged, is limited, and I can not assume to speak with the same authority with which many here can. I hesitate the more for the reason that the discussions of this society, as of others, go out as information to the profession at large, and it is therefore important that there should be wisdom and certainty in its voice.

My subject is the suggestion of my own method of surgical procedure, of my failures and successes. It does not relate to the more intricate and abstruse problems of the science and art of surgery. It touches alone those simple truths which the aggregate of my experiences have crystalized with a strong surgical faith. In my specializing I may

* Read at the Second Annual Meeting of the Association of Surgeons of the Southern Railway Co., held at Lookout Inn, Lookout Mountain, Tenn., June 29-30, 1897.

have limited my field within too narrow limits to be in strict accord with the ambitious, outreaching, grasping spirit of the period, but the motive in my specializing has been to do, even if it was very little, to do that very little thoroughly and well. To do this I have adopted the simplest forms of procedure. Nowhere is simplicity and orderliness more forcefully taught than in the processes of nature itself.

In using the term simplicity I mean to interpret it in its broadest scientific significance as it applies to surgery. Every surgical operation, whatever its character, should be done with the least possible fuss, amid the fewest, plainest and simplest of surroundings. Only the very least of the needful appointments and furnishings should be in the operating room and the room of the patient. All the surgery, down to the smallest detail, should be done, as far as possible, by the operator himself with little assistance, and that little should be as trained and skilled assistance as it is possible to obtain. There is a great risk that our skill and successes may make us careless as to many important factors of success. There is no possibility of our ever over-estimating our responsibility.

There should be few nurses in the operating room, little talk, and that in the lowest possible tones; every step and move should have a considered and definite purpose.

I remember to have witnessed a simple operation—the operator's attendants were seven residents and nine nurses. The loins of the attendants were neatly bound around by baseball belts, their hair thick, long and carefully plastered down and parted in football fashion. The nurses were trim in Oriental costume. The scene amid this preparation for a funeral was unique, solemn and impressive. Listerism was carefully practiced. The operation lasted one hundred and forty minutes. I did not stay to see the patient re-opened and the lost sponges searched for.

Our faith in the simplicity of methods is grounded in experience and the observation of facts. This experience has proven the need of but few instruments and improved our mechanical technique. A high mortality in surgery is always in accord with the limit of experience, inaptitude, inaccuracy, inattention to details, non-observance of the simple precautions which cleanse away and ward out dust. In this connection I will quote from one of the most eminent scientists of our generation, an original investigator of rare genius and success, Prof. John Tyndall:

"I have spoken of the floating dust of the air, of the means of rendering it visible, and of the perfect immunity from putrefaction which accompanies the contact of moteless air; consider the woes which this wafted matter, during historic and prehistoric ages, has inflicted on mankind; consider the loss of life in hospitals from putrefying wounds; consider the loss in places where there are plenty of wounds but no hospitals, and in the ages before hospitals were anywhere founded; consider the slaughter which has hitherto followed that of the battlefield when those bacterial destroyers are let loose, often producing a mortality far greater than that of the battle itself; add to this the other conception that in times of epidemic diseases, the self-same floating

matter has frequently, if not always, mingled with it the special germs which produce the epidemic, being thus enabled to sow pestilence and death over nations and continents; consider all this, and you will come with me to the conclusion that all the havoc of war, ten times multiplied, would be evanescent if compared to the ravages due to atmospheric dust.

"This preventable destruction is going on to-day, and it has been permitted to go on for ages without a whisper of information regarding its cause being vouchsafed to the suffering sentient world. We have been scourged by invisible thongs, attacked from impenetrable ambuscades, and it is only to-day that the light of science is being let in upon the murderous domain of our foes.

"From the vantage ground already won, I look forward with confident hope to the triumph of medical art over scenes of misery. The cause of calamity being once clearly revealed, not only to physicians, but to the public, whose intelligent coöperation is absolutely essential to success, the final victory of humanity is only a question of time. We have only a foretaste of that victory in the triumphs of surgery as practiced at your doors."

The corollary, the conclusions to be drawn from Prof. Tyndall's reasoning, would seem to be that the germ or bacterium is the primary cause of the calamities to which he refers, and that but for the dust or dirt the germ or bacteria could not exist. It is in the dust or dirt the poison, germ or by whatever name you may be pleased to designate it, germinates; avoid or remove this and you have a clean, unirritated and aseptic wound; one you can cure. We know what a little atom of contagion will do. The dust or dirt is the seed and it spreads as does the pollen of the growths of the fields.

We know the effect of the smallpox virus. Let this impure floating matter of the air fall into a wound and it will poison it, and this poison will be taken into the circulation and you will have general and dangerous septic conditions. The success following cleanliness, following going to and doing our work in a scientifically clean state explains the pathology of many conditions. What is said in this connection applies to all surgery.

The low mortality of our surgery in the late years has not been due to the extent claimed to antiseptic precautions, but to scientific cleanliness.

The sources of infection are very numerous. Invalids are a common source of the infection of healthy people. The transportation of children convalescing from scarlet fever or diphtheria spreads the contagion. In my own surgical work I have always dreaded a contaminated atmosphere, dreaded an overcrowded operating room, and for this reason I keep an empty room on each floor of a small private hospital. If I do three sections, each is done in a separate room, thus avoiding the too great risk of atmospheric infection. Infection may come from the old books of circulating libraries or those of a second hand book store.

Since time does not kill septic germs, they must be removed by the most rigid cleanliness. We have learned no more important truth than

that we may carry poison and death under our finger nails, in our clothes, on our instruments; and experience has established as an equally undeniable truth that soap and water are effective disinfectants, are good substitutes for corrosive sublimate. Absolute cleanliness is absolute immunity from all extraneous infection. We are staggered by the numerous groups and very learned scientific names into which the great germ family is divided and by which they are designated.

The dead languages are taxed for epithets. Our learned scientific investigators could save themselves very precious time—time which they could devote to the discovery of practical and scientific truths bearing upon disease and wounds and their treatment, and tax less the vocabularies of the old languages, if they would simplify their nomenclature. If they will take four letters, they can spell out, name and explain their germ theory—*dirt*. Lister's teaching and that of his disciples can be safely left to the high court of scientific inquiry for its condemnation. The spray was a sort of morning *befog*; it disappeared before the light of a better knowledge.

Many deaths have been due to the washing-out of the peritoneum with carbolyzed solutions. The same may be said of solutions when applied in general surgery.

As we approach our higher ideals in the surgical treatment of wounds, antisepsis will pass into disuse; it will come to be regarded as the curious superstition of an unenlightened profession; it will be recognized as in very many instances positively injurious. We will not here question its occasional value in obstetrics. But even in obstetrics the mortality in the practice of physicians in rural districts, where there is no resort to antiseptics, is very low. And in this connection we may take the gynecological operations, or those in general surgery, of this same class of physicians, who in emergencies are too distant from the general surgeon or specialist to call in his aid, and have to act without trained nurse or skilled assistants, with every surrounding against them, without any of the appointments, appliances or aids to be found in the general and private hospital; and yet, in the face of all this handicapping, these embarrassments, they meet with repeated brilliant successes. To the extent to which it is possible they make conditions aseptic. The truth is, if you are seeking for some fad, some fallacy, some old or late rot, some new cure, some new surgical machine, a "free silver" mounted, hardwood operating table with an automatic device attached to do the operating while you sit down and rest, smoke, take a little Kentucky bourbon, or something refreshing from a South Carolina dispensary, why, go to some of the loud, noisy, inventive specialists or general surgeons of our medical centers.

I assert without hesitancy, from conviction, that the great broadening of our therapeutical resources and our great advances in both general and special surgery are largely due to our general practitioners. From their ranks came the fathers. They have not indulged in lofty flights, but have stayed down on the ground and followed the plain, simple ways of common sense.

AN ADDRESS ON TYPHOID FEVER.

By H. A. HARE, M.D.,

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When I accepted the invitation of your president to address the Northumberland County Medical Society upon the subject of typhoid fever I was well aware that I was about to visit an area in which this malady was so prevalent that each and every one of my hearers would have formed definite ideas as to the plan of treatment which had proved most satisfactory in his hands. I come before you to-day, therefore, not as one who can instruct, but rather as one who thinks that by a comparison of views we may all return home with clear and definite ideas concerning a disease which in its frequency, duration and possibility of a fatal ending stands next to the great "white plague" of the race, tuberculosis.

It is an interesting fact, however, to note that this disease is, like many others of a preventable character, becoming less and less frequent, less severe and consequently less mortal. The statistics of forty or fifty years ago, which show us a mortality of from 20 to 40 per cent., are only to be found in isolated instances to-day, if at all, and occur only when the circumstances are most favorable to severe infection and most unfavorable to the patient. This fact is the more interesting when we recall the fact that greater knowledge of the disease and consequent increase in diagnostic skill causes the report of many cases of enteric fever which in days gone by would have been called continued fever, gastric fever or swamp fever.

To illustrate these facts, we find that the death rate of Vienna decreased from 12.05 per 10,000 to 1.1 after a pure water supply. In Dantzic the mortality has fallen from 10 per 10,000 to 2.4, and finally to 1.5 per 10,000. In Stockholm it has fallen from 5.1 in 1877 to 1.7 in 1887. So, too, in Boston, from 17.4 in 1846-49 to 5.6 in 1870-84.

In Munich it has fallen from 291 per 100,000 inhabitants in 1857 to 3.4 per 100,000 in 1896, and somewhat similar statistics can be produced for London and Manchester, for New York and Philadelphia (see *Therapeutic Gazette* for March, 1898), and this in face of the fact that the population of these places has increased several hundred per cent.

These tables are supported by the statement of Billings that in Norway, from 1888 to 1891, the mortality from typhoid fever was 755 in 7,467 cases, or less than 10 per cent. In the present Maldstone epidemic the death rate in 1885 is only 7.5 per cent., and a similar mortality obtained at Plymouth, Pa. Again, in the *Gazette Medicale des Hopitaux* of July 10, 1890, we learn that a collective investigation showed that whereas in the period from 1866 to 1881 the mortality from typhoid was 21.5 per cent., from 1882 to 1888 it was 14.1 per cent.; in 1889, 13.5 per cent.

It is evident, therefore, that the mortality to-day should be placed at less than 15 per cent. as a fair percentage, the more so as many years ago Murchison placed it at 17.45 among 27,951 cases in England.

In studying the effect of any given plan of treatment, therefore, we may start with a basis of 15 per cent. at the most, as what may be called the normal death rate. As a matter of fact, I believe it to be lower than this, for I have collected from Germany, France, England and America a large number of statistics, which show that in 27,116 cases the mortality is about 10 per cent., if careful nursing and non-meddlesome treatment is used. This greatly lowered death rate indicates a greatly lowered severity in the symptoms of the disease, and, therefore, the malady runs a milder course naturally at this time than formerly. I mention these facts because they must be recognized before we can give credit to any plan of treatment. There are other facts which must also be considered before the advocate of any plan of treatment can assert that his method is the best. In a disease of this character deductions can only be drawn after the accumulation of a large series of cases, not fifty or sixty, but of hundreds of patients. This is shown by Mason's studies in Boston.

During 1890-91 there were treated in the Boston City Hospital 676 cases of typhoid fever, of which seventy-five were fatal, or 10.4 per cent. This includes all cases—mild, moribund, or doubtful—which entered the house. To illustrate how statistics may mislead, Mason records five different series of cases, aggregating 242 cases, with five deaths, or a mortality of about 2 per cent. It is well in this connection for us to remember that a disease that can not be aborted and which runs a definite course till it is completed will do less damage to the patient, if the case is guided through the storm so that his natural processes are not perverted, than if by meddlesome or absolutely harmful treatment his organs, already bearing the burden of disease, are still further strained by the influence of unnecessary drugs and by the necessity of absorbing and eliminating them.

The best treatment for typhoid fever is to let drugs alone so far as possible. Yet it can not be denied that in some instances routine plans of treatment seem capable of causing good results, probably because they keep their users from resorting to individual plans of treatment which are harmful. To express it differently, it is evident that if a given routine is followed which is manifestly not incorrect in its fundamental details, better results will be obtained than if each physician steers his patient on a course of his own choosing, which may not only be useless but actually dangerous.

This is shown by the facts presented by Liebermeister in his well-known article in Ziemmsen's Cyclopedia, in which he gives carefully prepared tables of 839 cases, of which 377 were treated non-specifically, with a mortality of 18.3 per cent.; 223 treated by full doses of calomel, with a mortality of 11.7 per cent.; and 239 with iodine, with a mortality of 14.6 per cent. If the grave cases are included in his statistics, the mortality of a general plan of treatment was 25.3, those treated with calomel 16.3, and with iodine 17.2 per cent.

Under cool sponging Jaccoud lost out of 655 cases 10.8 per cent. Riess in 900 cases, with the use of tepid baths, had a mortality of 7 to 8 per cent., and under pure expectant treatment, with plenty of water to drink, Debove had a mortality of 9.2 per cent.

Having discussed these facts, let us turn to what is the best plan of treatment. Before doing this, we must, however, determine what may be called the necessary mortality of typhoid fever. That is to say, no plan of treatment can prevent a certain number of deaths from accidents such as perforation and hemorrhage, even if other ill effects are put aside. The death rate from these causes reaches about 7 per cent. The saving of life which we can expect to produce by good treatment is, therefore, that between 7 and about 15 per cent. at the most.

Now in regard to treatment, the medical profession has learned one dominant fact, namely, that while they can modify the severity of typhoid fever by prophylaxis and by proper treatment, they can not abort it or cure it. To express it briefly, the physician must guide his patient through the storm of his infection as a captain guides his ship. He can relieve dangerous symptoms, protect to some extent certain parts from fatal damage, place the whole system of his patient in a state best qualified to resist the disease; he can prolong it by bad treatment, but he can not shorten the storm by any direct means. This fact rests upon two others, namely, that the infectious process runs a given course in each case so far as its length is concerned; and secondly, the physician, unlike the captain of a ship, takes charge of his patient not before the storm, but after it has in gradually increasing intensity been developing in his patient for two weeks before it has manifested itself, and often for as long a period before its character is recognized. The pathological changes have been produced, and even if they do not progress further the process set up must run its course in the case of the intestine, for example, till the glandular changes are completed in ulceration or recovery. Every plan of treatment which has been tried in a sufficiently large number of cases to be studied statistically emphasizes these facts, and is directed to a modification of the symptoms and a protection of the patient against injury and not the true cure in the sense of specific medication.

In Germany some forty years ago typhoid fever patients were treated by catharsis, emesis and venesection. To-day the vast majority are treated by the cold bath, which, whatever objections may be raised to it, at least permits the system to combat disease and eliminate toxins without fighting the treatment in addition. Again, good nursing and the recognition that the conservation of energy is absolutely essential for the saving of life aid non-meddlesome methods.

At present there is another plan of treatment largely employed in the treatment of this disease, namely, that by antiseptics. In my belief, both the bath method and the antiseptic plan are but gropings in the dark, each possessing a glimmer of the light of truth in them which prevents us being lost. It is a safe rule to practice to a middle stand in accepting and carrying out any particularly highly lauded plan of treatment of disease. Particularly should the physician avoid routine plans

of treatment, for as long as human beings differ in their characteristics and micro-organisms differ in their virulence, each and every patient must be treated by himself; or, in other words, the treatment must be varied by the necessities of the individual. For this reason the plunging of every patient in a tub of water at 70 degrees F. because he has typhoid fever is not good therapeutics, and so the use of purgatives or intestinal antiseptics in practically unvarying amounts is unwise. All great underlying principles may be right in theory, but they must be so utilized as to meet the exigencies of life. In other words, the cold bath treatment and the antiseptic treatment do good in principle, but they must be suited to the patient before us.

There is not time in this discourse to show how a large part of the low mortality claimed by the enthusiastic followers of either of these plans is in part due to the careful nursing, feeding and stimulation of their patients. I have recently (*Therapeutic Gazette* for March 1, 1898) seemed to prove that the bath only decreases the mortality about 3 per cent. in itself. The chief fault with the adherents of both plans is that they are so well satisfied each with his method that they will not use the other, and nothing is more disastrous to patient and to the success of the doctor than the confidence of the latter that the plan he is using is the best to be found. It may be as good as he knows of, but his business is to find a better one always, or at least to seek for it.

In regard to the antiseptic treatment, so called, it has not found general recognition, because the grain of truth that intestinal fermentation and germ development is harmful has been surrounded with such a mass of theory not in accord with facts, and its technique has been so varied and so futile or heroic, that the grain of fact is overwhelmed. Intestinal antiseptics in typhoid fever is a good thing, but it is not the only good thing and often not a necessity. So, too, the bath is not the only thing needed or always a necessity. Beyond the use of antifermentative drugs to combat evidences of intestinal disorder, I confess that I have never resorted to this sole plan of treatment for the reasons given; and so, too, with the cold bath, I have been impressed with the fact that the full cold bath is not for every one. As I have said before, every one does not need croton oil for constipation or twenty drops of digitalis for a failing heart. The skill of the physician consists in knowing not only the general remedy but the dose. It seems to me, therefore, that in the use of antiseptics and purgatives, we should use judgment and not routine, and that the same rule holds true of baths.

It is our duty to understand the great underlying principles of a plan before we try it or modify it. In the case of the bath we find that its antipyretic powers are now recognized as being its least useful characteristics; that the most able hydrotherapeutists not only admit, but assert, that he who expects to throttle the fever by the use of the bath will be mistaken, and that the benefits to be derived lie in the improvement of the circulation, the overcoming of stasis, the production of leucocytosis, the encouragement of oxidation, and the reactive awakening of dormant and intoxicated venous centers. If these are the desiderata, how are they to be attained? Without doubt, in a fairly large

proportion of cases in which the temperature is high and in itself dangerous because of its height, by the use of the plunge we get effects which are most desirable; but there are conditions of mind and body which are capable of contraindicating the bath, just as there may be conditions contraindicating the use of quinine in malaria. Are we then to ignore the contraindication, or are we to allow the patient to suffer for want of these beneficent effects? We are to do neither, but to devise another plan for producing them without the factors contraindicated. This can be done by a modification of the cold bath in such a way as to preserve some of its good and excluding its evil effects, and we find its type in the profusely applied cold sponging. I believe this should be used as follows to produce the effects needed, and just as the bath will prove futile if badly given, so will the sponging: The patient should be placed on a blanket on his own bed, stripped, and the nurse should then apply rapidly over his surface a sponge dipped in water varying in temperature with his reactive power and persistency of temperature. It is my custom in the presence of moderate fever, say of 102.5 degrees, to order sponging with water at 70 degrees; if the temperature does not fall readily under this, to use water at 60 degrees, 50 degrees, or with ice in it. At the same time that the cold water is applied, the patient is thoroughly and actively rubbed by another until reaction takes place and the surface of his body is bright red. By this treatment the vascular tone can be as well if not better maintained than if the patient is put in a tub, and no cyanosis and severe shivering occurs. Further, it is possible to properly rub and sponge the great muscles of the back, in which region stasis and bed-sores often form, and it is worthy of note that these parts are not rubbed when the patient is in the tub. The rubbing, or massage, is a very important part of the bath, and if it is not performed both the tub bath and sponge bath are nearly futile. In these cases, when the fever is not marked—that is, as high as 102 degrees—sponging with alcohol and rubbing may be used to maintain capillary circulation and improve the nutrition of the connective tissues. We are told by the full bath advocates in this country to tub all cases unless they have hemorrhages or perforation or are far advanced in the disease. It seems very much more rational to suit the needs of each case by modifying the bath, provided we are sure to obtain reaction and overcome stasis and improve nervous tone.

Let me urge upon your attention the wisdom of giving a more generous diet during the course of this exhausting malady. Surely a pure milk diet is needlessly scant and loads the stomach with large quantities of liquid. Eggs up to three or four a day, soft custards, arrowroot and thin cornstarch may often be given with advantage, and even meat broths may be used, although they sometimes cause diarrhoea and may act as culture media for the bacillus. If Graves' epitaph was to be "he fed fevers," surely typhoid fever is one of them.

The use of antipyretic drugs is seldom if ever needed in enteric fever. Personally, I never use them for any fever, because they decrease the oxygen-carrying powers of the blood, they give the eliminating organs the work of eliminating them, and in all probability decrease the power

of the body to withstand infectious disease. Further, the most that they do is to remove the fever; no one has claimed for them the power to modify the disease, and the fever in itself is usually by no means a dangerous symptom. On the contrary, fever is, in some instances at least, a protective process capable of no harm. Only when it is excessive does this symptom need treatment.

It would seem as if fever in a disease like typhoid fever is simply a part of the symptom group, a part which may be taken as an index of the severity of the attack, but not the most important part of the malady, any more than the quickened pulse rate, the diarrhoea or the spots make the disease in themselves. But if it be true that fever is not a symptom of particularly evil import, why attack it by the use of the cold bath. As a matter of fact, the cold bath is not directed so much to the fever as to the combatting of the toxæmia and the arousing of the nervous centers stupefied by the poison.

A word about stimulants and supportant treatment. The more I see of current medical treatment the more inclined am I to believe that drugs are given too often and too much. I have been said to be a therapeutic nihilist while teaching therapeutics because I have expressed this view. Nothing can be further from the facts in the case. A therapist is one who knows not only when to give drugs, but when not to give them. Because a man is a good shot with the rifle he is not expected to shoot at everything he sees. Neither is a good doctor expected to drug every patient who comes to him. The skill of the physician consists in knowing when to shoot. In no respect are drugs so abused as is the class known as stimulants. Our knowledge of most of the true circulatory stimulants derived from the vegetable kingdom shows that they are not particularly well suited to febrile states. Alcohol is, however, well suited, but how often do we give it when it really is not needed? A patient lying quietly in bed is not supposed to have a very strong pulse, yet I have often, when tempted to give a patient some alcohol, felt my own pulse and found it weaker than that of the patient, proving that the seemingly feeble pulse of the patient was not so at all. Too often are we led in our anxiety to aid the patient to overlook the fact that disagreeable symptoms must be met with in the natural history or course of the malady, and to attempt to meddle with it instead of letting it pursue its course, which it will do in many instances without evil effects.

On the other hand, there are times when very active interference is necessary, and here the maxim "be sure you are right then go ahead" is to be followed fearlessly. In this connection let me speak of the use of camphor as a general diffusible stimulant in exhausting diseases, and for the same purposes in medicine as we commonly employ strychnine at this time. Graves, of Dublin, regarded it as one of the best remedies we possess for the prevention or relief of collapse, and yet the profession has, in its search for new things, given it far less attention than it deserves. It has been found of great value, both when given internally and hypodermically, in such severe maladies as Asiatic cholera and many other ailments. A large amount of literature might be gathered concern-

ing its value, but I need only quote Alexander, who has used it successfully in the exhaustion of phthisis, and Schilling, who has found its value to be very great in nearly all the severe infectious maladies. While it quiets nervous excitement, it seems at the same time to support the circulatory and nervous systems. In advanced typhoid fever I have found it very valuable. The doses I have employed have been fifteen to thirty minims of a 1-to-15 olive oil solution of the drug, given hypodermically, and my resident physicians having seen its beneficial results have used it without my orders in a number of urgent cases when I could not be consulted, so effective have they found its action to be.

In the toxæmia of severe typhoid fever and in combatting hemorrhage in this disease, let me call attention to hypodermoclysis. This method deserves much confidence and its wide scope of usefulness makes it a valuable aid.

SOME QUESTIONS OF THE LEGAL RESPONSIBILITY OF INEBRIATES.

By **T. D. CROTHERS, M.D.,**
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A serious crime is committed by a person intoxicated in the general sense, or at least, absolutely under the influence of alcohol; a will is written while the person is using spirits to excess; an important contract is made and signed in this same condition; a course of criminal conduct is followed, and the actor is using spirits constantly to excess.

Such cases come into court. The counsel turn to the physician for help. There is some abnormality in each instance. The acts are without the pale of reason, and the continuous use of spirits clearly disturb the natural common sense line of conduct of the person. The lawyer turns to the rulings of judges in similar or allied cases, and the physician to text books of medicine and medical jurisprudence. Both fail; while the lawyer finds rulings that apparently apply to such cases, he is conscious that they do not comprehend or recognize the real facts in issue. The more closely he studies these facts, the wider the discrepancy between them and the theories of the law. The judge recognizes this inconsistency, but is forced to follow lines of previous rulings, and only along certain narrow limits dare he venture to express opinions at variance with others. The legal theories of these cases are the outgrowth of the moral teachings of past centuries. Teachings that inebriety is moral depravity innate in every life, always ready to grow and develop, and particularly from wilful neglect and gratification of the lower animal instincts. Also that inebriety is always a phase of savagery, or inborn tendency to lawlessness, to giving up restraint and control; indulging all

the passions regardless of society or the interests of others. The remedy is punishment, suffering, pain, and in this way building up the moral to control the lower animal.

Lord Coke's rulings three centuries ago, that inebriety always aggravated the offense, and should be followed by increased punishment, has been accepted and acted upon as the central truth in all these cases.

The physician who is called into court to assist in reaching equitable decisions in such cases, finds little or no help from the text books. Dogmatic statements and theories, that are obviously unsound and in conflict with the facts, comprise the largest part of so-called authorities on this subject. The physician turns to a study of the cases, and seeks to find out the facts as they are presented in real life. Here a new world of truth confronts him. The inebriety of the prisoner, or the case in question is found to be a physical condition that is both inherited and acquired. This physical condition is literally a disease, and is practically an obscure or pronounced form of insanity. In some cases the drink craze is a symptom of insanity, and vice versa. When the symptoms of a large number of cases are studied and compared, they are found to follow a uniform line of origin, progress and development.

Taking up the story of alcohol on the system, it becomes clear that the continuous use of alcohol, or spirits taken to excess at intervals, is always followed by degrees of brain and nerve palsy, paralysis, congestion and impaired and diminished activities. Alcohol in the system to excess is always followed by incapacity of the senses and judgment, with lessened power of control. The degree will vary widely with the amount taken and the state of health, but impairment and disability is a physiological consequence, that is absolute, to which the exceptions only prove the rule. The legal theory on which the present administration of the law is carried out, assume sanity and sufficient mental soundness to both recognize and act differently, the remedy for which is more severe punishment and accountability.

Practically this theory presupposes a degree of psychological knowledge and capacity to distinguish lines of health and disease, that is far beyond any present attainments of science. The conclusions from a medical study of these cases is that every case is one of physical degeneration and progressive march downwards. A dissolution that follows a continuous line of cause and effect that can be seen and recognized. These cases are not metaphysical theoretical states of the mysterious mind and will power. They are actual tangible conditions that follow with absolute certainty causes that may be known and conditions that are traceable. The real medical jurisprudence of inebriety is first a question of the facts in each case, and their meaning. Facts of heredity, of growth, of culture and health; facts of disease, of injuries, of degenerations, local and general, of the influence of surroundings, of occupation and climate, and all the history, physiological, pathological and psychological. From these facts only can any clear intelligent conception be formed of the act and its motives. When this is settled then the legal question of what shall be done, and what disposition will more accurately serve the cause of justice will appear. The medical

jurisprudence of inebriety theoretically aims to check and prevent illegal acts by inebriates. But practically and literally the very opposite effects follow. Experience of all courts in this country and Europe agree that capital punishment for murder committed by inebriates never deters other inebriates from committing similar crime. Yet notwithstanding this fact, inebriates are tried and executed daily all over the country.

Fines and imprisonment for illegal and criminal acts are not only absolutely worthless as deterrents, but increase the very condition which it proposes to check. The physiological fact in these cases is that legal penalties which are supposed to appeal to the higher moral brain make no impression, for the reason that the higher brain is so impaired and palsied that it can not recognize or respond to these influences.

The question of the legal responsibility in any given case where spirits has been used before and during the act in question, must be decided from a study of the mental health of the man. If there is a reasonable doubt of the mental soundness at the time the act was committed, the degree of responsibility will be changed. If there is evidence of delusions, or strange, unusual beliefs which influence his conduct and warps his judgment; or if his mind acts in an impulsive, unreasoning way, apparently under an irresistible impulse, that is beyond his control, incapacity should be expected. The question of capacity to distinguish between right and wrong in all these cases is difficult and confusing.

The immediate effect of alcohol is to obscure and break up this power of discrimination between right and wrong.

The use of alcohol is always followed by an increase in the heart's action, and later a corresponding diminution of the flow of blood. This increased heart's action is followed by unsteadiness of brain force and activity. The increase of the heart's action extends to all parts of the body, giving the appearance of greater power, then after a time lessened power and energy until stupor comes on. In all men who use alcohol occurs this alternation of exhilaration and depression, and when this is repeated for years positive damage follows. First of all, the senses become impaired, and this always darkens knowledge and misleads the judgment. This follows from the fact that accurate perceptions are wholly dependent upon definite and normal sensations. When the senses are disturbed and impaired, perceptions are correspondingly disturbed; they are unable to present the facts to the mind as they are or as they really exist in the surroundings.

The fine shadows, the uncertainties and doubts which attend all human transactions escape the notice of the inebriate, hence he imagines they do not exist. Hence, the more alcohol he uses the more positive things appear; they have the quality and energy of absolute demonstration. He never doubts or hesitates. Such a man is a dangerous witness in criminal courts, because his defective knowledge has a morbid positiveness that often carries conviction. In reality an inebriate witness testifying to events observed while sober is more reliable than a sober witness testifying as to events observed while intoxicated. The inebriate is literally in a state of anæsthesia, manifested by the rude

grasp of the hand, a loud voice and a certain exaggeration of manner, as if to assure himself of the reality of his senses.

The sense of touch, of sight, of hearing, of smell and the muscular sense, all show disturbance, and point to a degree of paralysis, which manifests itself in illusions, hallucinations and perversions, impeded articulation, staggering gait and diminished functional and organic activity. This is literally paralysis in a degree, and extends to the control of volition. No effort of will can remove or lessen these incapacities from alcohol. Weakness, prostration and debility respond in some measure to the calls of volition, but paralysis from alcohol never. Hence the responsibility of the inebriate is lessened and differs from that of all other narcotic states in direction and degree.

It can be readily seen how impossible it is for the mind to receive accurate knowledge of events and persons exterior to it when the senses are obscured and imperfect; also when this degree of paralysis extends to the higher operations of reason and coördination, where both the facts and the conception of them are faulty and perverted. The coördinating brain centers are enfeebled and can not analyze the impressions of the senses, and this extends to those higher operations of the brain called morals. The paralysis of the lower ranges of brain activity quickly dulls and breaks up those fine distinctions of duty and the consciousness of right and wrong. It is a physiological law of growth and development that the highest elements of brain activity and power are formed last. This is called the character, the "moral" of the man, and from the use of alcohol it appears to be the first to suffer and be destroyed.

The inebriate, like the man intoxicated, exhibits confused, halting ideas and beliefs of morals, and his duties to his fellow man. His ethical sensibilities and conceptions of duty and obligations undergo a progressive degeneration, while the coarser organic operations of the mind and body seem but little disturbed. Hence the acts and thoughts that are supposed to be malicious and brutish indicate merely a suppression of the higher coördinating centers. This is seen practically in many cases where persons of refinement in thought and act, after the use of alcohol, have become coarse in language and manner, also brutal in conduct. Often the inebriate is amazed when told what he has said and done while under the influence of alcohol, showing how far he has been dominated by the alcoholic paralysis. But if the drinking has been continuous, he is unable to review his thoughts and acts, and both the mind and body undergo debasement that is fixed. Morally, mentally, and physically, he slowly or rapidly grows crippled and deformed. The inebriate is literally a moral paralytic, his intellect is disordered, and among the insane none are more dangerous, for the reason that he has no fixed mentality or conception of himself and his relations to others. He may before the use of alcohol have formed habits and conceptions of life that cling to him automatically, and thus be able to appear and act along the ordinary grooves of normal life. He may as a professional man or as an artisan or farmer pursue his avocation with reasonable success; but let some supreme crisis intervene, let some emergency throw him out of his automatic range of life, and his true state will be revealed.

His damaged brain will be seen in the crimes and the insane confusion of all his thoughts and acts. From alcohol alone this conclusion is sustained beyond all question, viz., that its effects on the brain and nervous system are anæsthetic and paralyzant. The heart, the senses, and then the higher brain centers slowly succumb to paralysis, while the victim's capacity to realize his true condition and adjust himself to it grows less and less. His conception of right and wrong, of duty, of obligation and responsibility grows more and more confused. Often this is masked by automatism, and the victim may perform his daily routine in accordance with his surroundings, but he is a mere mental waif, drifting at the mercy of his surroundings and the uncertain conditions of life. The mental incapacity of inebriates to reason clearly about their acts and the consequences of them is fully sustained by the facts of heredity. All statistics agree that over 80 per cent. of all inebriates are born with defective brains and nervous system. Their ancestors are inebriates, insane, epileptic, idiots, feeble-minded, neurotics, consumptives, and others, who are diseased, and who transmit to their children either special disease tendencies or general constitutional defects. These classes are wanting in brain, health and vigor; they are unable to bear the strains and drains of life, or adjust themselves to its changing conditions. If they do not inherit a special tendency to alcoholic disease, they have a defective brain soil, from which disease springs upon the slightest exposure. As shown by their defective external appearance, the brain and nervous system are imperfectly formed, dwarfed, and incapable of acting normally. The effect of alcohol on such an organism must of necessity reduce it below the plane of healthy activity and responsibility. These are general principles that are beyond question in the field of scientific inquiry.

The fact I wish to make prominent is not the irresponsibility legally of these cases, but to show that the present legal standard of judgment is wrong and contrary to all teachings of science. The superstition that insists on full measure of accountability in all cases where spirits are used, and assumes that the use of alcohol is a voluntary act of a brain both conscious and capable of control, is a sad reflection on the intelligence of the present.

The interpretation of the law that boundary lines of responsibility and irresponsibility can be marked out in these disputed cases of inebriety is a delusion. The effort to find a dividing line where sanity and insanity join, or where the brain could or could not have controlled its acts or realized their nature, is an impossibility. The strange theory which seems to be fixed in the legal conceptions of inebriety, that alcohol can be used to excess at times, or continuously, and the person retain the full possession of his faculties and have the same power of control as in health; also, that no history of excessive use of spirits before or during the commission of the act, has any bearing on the case, unless associated with marked symptoms of insanity, are all errors that make justice impossible in these cases. To-day a large per cent. of all medico-legal cases are associated with inebriety and the use of spirits, and the legal responsibility by which they are judged are from theories

urged centuries ago. The legal responsibility and accountability of these cases is very different from that seen in courts of justice.

The teachings of modern science open up a new world of facts, that indicate clearly the physiological nature of all brain activities. Facts that show the influence of heredity, of injuries, of diseases, of strains, of drains, of failures, of diet, of surroundings, of culture, of ignorance, and all the vast ranges of influences and forces, which enter into the acts and character of each one. Facts that show a march downward, and progressive degeneration, or development and evolution. It is from this evidence that the questions of responsibility and capacity to act sanely at any time and under any circumstances can be solved. No legal responsibility in inebriety can be solved from any other point of view, or from any theories. It is a pure question of facts, not theories of the law, or rulings of judges. What is the history of the man and the act in question? Ascertain these clearly and the problem is solved; fail to do this and confusion, injustice and wrongs follow. The legal responsibility of inebriety as administered by courts to-day is a farce. A new jurisprudence is demanded, a new scientific study and recognition of these cases and their disabilities is called for. This demand is felt in every court of justice by clear, thoughtful men.

INFLUENCE OF ALTITUDE UPON THE BLOOD.

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The administration of iron to patients suffering from the various forms of anæmia has been a routine procedure for many years, sometimes with satisfactory results, but just as often with no favorable change.

Indeed, it is difficult, in these days of therapeutic nihilism, to find a well-posted clinician who will assert positively that iron is of any benefit at all except indirectly and in a slight degree; that there is a great doubt in the mind of the profession is shown by the many conflicting statements of the therapists when they are fighting the battle of organic versus inorganic iron preparations. Here in Colorado, however, we can offer to the anæmic or depleted invalid nature's own hæmatin, in the marvelous effect of altitude in increasing the number of red corpuscles and their hæmoglobin content.

Within a very few days of arrival at a point of high altitude, the process of blood regeneration is observed in an increase in the number of red corpuscles, accompanied by an increase in hæmoglobin, the latter

being somewhat slower than the former. The process seems to increase with the altitude, as shown in the following table:

(Published by Köppe in *Munch. Med. Woch.*, 1890, No. 41.)

Place.	Altitude Metres.	Red Cells.	Author.
Christiana	Sea level	4,974,000	Laache
Gottingen	148	5,225,000	Schafer
Lübingen	314	5,322,000	Reinert
Zürich	414	5,752,000	Stierlin
Auerbach	425	5,748,000	Köppe
Reiboldsgrün	700	5,900,000	Köppe
Arosa	1,800	7,000,000	Egger
The Cordilleras	4,390	8,000,000	Viault

It is said by Köppe that the corpuscles are small, thus making no increase in the total volume of corpuscles, but this is not mentioned by other observers, I believe. While I do not wish to range myself as an authority against Köppe, I will say that my impressions, formed from a good many examinations, do not bear out Köppe's statement.

It is also said that upon a return to the low altitude, the number of red corpuscles goes down to the original count. This may be so in some instances, but there are many reasons for doubting its general truth, especially where an anæmic patient has remained a reasonable length of time at the high altitude, so as to have passed beyond the time of temporary effects, remaining long enough for a positive impression to have been made upon physiologic processes. I might mention that I, who have lived in Colorado almost all my life, after a stay of five months at sea level, yet had a red corpuscle count of 7,000,000 something over a year ago.

The point to which I desire to call the attention of eastern readers of the Times is, that in our altitude here we have an unfailing means of building up depleted blood, certainly a boon to the anæmics, chlorotics and other blood-poor invalids of lower regions who have failed to receive benefit from iron and other hæmatinic drugs.

PROGRESS IN NEUROLOGY.*

By PROF. C. H. HUGHES, M.D.,

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Since last we met neurology continues its onward march, both in special discovery and in new and better precepts and principles to guide the practice of our art. More and more as the years go by, medicine in general, with its many departments of practice, looks to the neurological sky for light, even more than, or at least quite as much as, it looks elsewhere about the firmament of the sciences for further illumination.

*Chairman's Address before the Section on Neurology and Medical Jurisprudence of the American Medical Association at Denver, Colo., June 10th, 1898.

The dictum of Cullen more than a century old, promulgated in a century of theory, has become an embodied fact of clinical medicine, notwithstanding the justly recognized influence of the blood microbes, bacilli, bacteria, etc., in the play of health and of the morbid motions of the economy, and in the development of phagocytosis in the destruction of disease. The nervous system, omnipresent in every problem of disease, of life or death, is now prominently considered by all thoughtful and well informed men of medicine, and neuriatry and psychiatry have become familiar phrases in, as they are common phases of, symptomatic expression and descriptive thought. "*Quantem ergo quidem video motus morborum fere omnes a motibus in systemate nervorum ita pendent, ut morbi fere omnes quadammodo nervosi dici queant.*"

It seems strange that we can in mental vision vault across an intervening century and see a British observer, before even Marshall Hall had differentiated the sensory from the motor nervous system of the cord, promulgating a doctrine from the meager data of his time which all the rich revelations of neurology and neuriatry since his day, of psychology or psycho-physiology and cerebrology, including psychiatry, have planted on an immutable foundation of truth.

It would be interesting but not germane, to dwell a while on the work of this early neurologist and his American contemporary, Benjamin Rush, as we did in regard to the latter in last year's report on the century's neurological progress, for comparison, but the record of the year's work in our field will more than exhaust the lawful time limit of our task to-day.

During the past year the neurological view of heart disturbance finds further confirmation from physiological sources in the following recent editorial reference to the subject in the *Deutsche Wochenschrift*:

"A series of experiments at Buda Pest, producing artificial valvular insufficiency and dividing the vagi, seems to demonstrate that alterations in the nervous system play an important part in preventing compensation in cases of valvular insufficiency. The vagus is the intermediary between the heart and the extracardiac nerve centers. After both vagi were severed in these experiments, the spinal nerve mechanism of the heart was insufficient to carry on the work of the organ unaided for a certain length of time, but this period was much shortened if, in addition to the severed vagi, there was also valvular insufficiency. Likewise, the heart carried on its work in spite of valvular insufficiency when the innervation was undisturbed and even one vagus was left. The same result was obtained alike with cats, rabbits and dogs, leading to the inference that the cause of lack of compensation in a person with valvular insufficiency is in some functional or anatomic disturbance in the cardiac innervation, rather than in the cardiac musculature. Numerous clinic symptoms confirm this assumption; arrhythmia, etc., and Ott's statement that he found the nerve cells degenerated in cases of 'incompensation.'"

The direct neural and reflex nervous disorders of the heart constitute our chief concern in clinical medicine and damage to the vagus and upper abdominal viscera constitute the chief concern in the management of most cardiac affections, as the neurologist, the alienist and even the general practitioner encounter them in practice.

Here, as in nearly every department of medicine, neurology, physiological or pathological, continues to shed its salutary rays of light on clinical medicine.

The past year has witnessed more attention to psychiatry on the part of neurologists and more attention to pathological work, as instance in illustration the wide range of subjects treated of in the *State Hospitals Bulletin*, of New York, a publication which bids fair to become as famous for record of good work as the well known and unsurpassed *West Riding Asylum Reports of Great Britain*.

A committee of the American Neurological Association has, since our last meeting, taken up and reported to that body on the subject of the after care of the insane.

In this connection I note that Dr. Putman, of Boston, in the transactions of the Association of American Physicians and in the *American Journal of the Medical Sciences*, offers new views of thyroidal diseases and Graves' disease, and Dr. J. T. Eskridge, of Denver, also on some new uses of the thyroid extract. Our colleague of this city, who never rests from his labors, will soon be heard from in the *American System of Practical Medicine*, volume IV., now in press, and has reported in the September *Medical News* an interesting case of intradural spinal tumor, extending through the foramen magnum, compressing the extreme upper portion of the cord and almost completely destroying it at the third cervical segment.

Up to 1884, Drs. Goodell, Pallen and other gynecologists advised the removal of the ovaries in all cases of insanity.

That same year Dr. T. G. Thomas reported three cases of insanity following the operation, and Dr. Putzel, of the New York City Lunatic Asylum, reported one hundred post mortems on insane women dying in that institution without a trace of disease of the ovaries.

Since our protest in 1882 (*vide Alienist and Neurologist*, January, 1882) against the too reckless surgical disposition then in vogue to "obliterate the neuropathic constitution by excising the ovaries," and the later protests of our neurological colleagues, a sensible conservatism has supplanted reckless radicalism concerning this operation which Spencer Wells, Matthews Duncan and Martin, of Berlin, early discountenanced. And now neurology and gynecology clasp hands on common grounds respecting this operative procedure. Lately Drs. Weir Mitchell, Wharton Sinclair and F. X. Dercum have counseled and reported marked progress in the direction of a salutary escape of the pelvic viscera from the surgeon's knife in neuropathic states hitherto erroneously considered remediable only by radical operations, and the medical press since our last meeting (*The Medical Council*, March, 1898) thus marches with us in line of neurological progress:

"Somewhat recently two Italian physicians, Drs. Angelucci and Pieraccini, of the Provincial Asylum of Macerata, addressed letters to prominent alienists in various countries, most of them in charge of asylums and clinics, resulting in the tabulation of one hundred and fifteen cases subjected to a pretended operation, and one hundred and nine actually operated upon.

"Their studies forced them to the sensible conclusion that the removal of normal intra-pelvic organs for the cure of general nervous affections was wholly unjustifiable, and that hysteria in itself is actually a contra-indication for the performance of a serious gynecologic operation. They suggest, further, that in hysteric conditions, not remedial by other means, a simulated operation may be beneficial. The pathological condition of the uterus and its adnexa should be the only indication for their removal, and that all the benefit that may accrue to nervous and insane women from the removal of any part of their generative organs is merely due to suggestion, and this is equally effective in simulated procedures."

The entire editorial under the caption of "Unjustifiable Pelvic Operations" is a further evidence of the invasion of neurological thought into the domain of general clinical medicine and surgery, especially during the past year, and confirms our long ago expressed conviction (*vide Alienist and Neurologist*, 1880) that "neurology is destined to reign paramount in medical thought and practice."

Playfair, a professor of obstetric medicine in Kings College, contributes a chapter to Allbutt's "English and American Gynecology," and Howard Kelly, our own countryman, in a late number of the *American Journal of Medical Sciences*, opposes needless vaginal examinations and repeated local treatments of virgins from a psychical standpoint, as any neurologist might.

The year since last we met closes with the prevalent professional conviction, no longer confined to neurologists alone, that the neuropathic diathesis is not removable by the knife.

The manner in which the neuropathic constitution is often overlooked among gynecological chirophilas is revealed in the following, taken from the "conclusions" of a writer in the *Boston Medical and Surgical Journal*, no further back than 1895:

"(3) The extent or form of pelvic disease is no indication of the character or degree of the resulting nervous manifestation.

"(4) The most thorough pelvic examination should be made with the aid of an anæsthetic, in every obscure case of [to the ordinary practitioner and gynecologist, of course, he means] nervous disease in a woman, occurring during the age of menstrual activity."

Why not a genital examination and operation in all nervous men?

"(5) Some forms of uterine disease may occasion an amount of nervous disturbance which may require the removal of the healthy Fallopian tubes and ovaries as the simplest and safest means of cure."

This is an exceedingly vicious conclusion, for there can be no justification for the belief that the uterine appendages are at fault unless they are sensibly diseased, and neurology, which has the best right to be heard on this subject, has never taught or believed in this monstrous conclusion.

Great neurological progress has taken place in the past and few preceding years in the abandoning of such conclusions by the best gynecologists.

The influence of magnetic stress on physiological action as a part of neurotherapy is worthy of note here, and on this subject our colleague, Prof. W. J. Herdman, in the *Bulletin* of the electro-therapeutical labora-

tory of the University of Michigan, in his capacity of director thereof, called attention to this subject, October, 1887, showing a 10 per cent. daily increase of eliminated urea on the days when subjects were in the magnetic field, and upon animals 20 per cent. of increase of nutrition for eight weeks while in the magnetic field, with a gradual decline after the twelfth week, showing tolerance. These results correspond with d'Arsonval's.

The surgical treatment of exophthalmic goitre was the subject of discussion at the French Surgical Congress, Paris, October, 1897. M. Faure, of Paris, reported having excised the cervical sympathetic in three cases. In the first of these, the superior cervical ganglion, along with five or six centimeters of the descending cord, was excised on both sides; after four months the exophthalmos had diminished, the goitre was less in size, the tachycardia and the general health had much improved. In the second, the entire sympathetic was resected on the right side (superior and inferior ganglion included), the superior ganglion and part of the cord only on the left side (because of the onset of alarming syncope); this patient improved still more markedly than the first. The third case died on the table after the entire sympathetic cord had been removed from the right side and the dissection on the left side was about to begin.

I introduce this record of so-called progress in surgical neurotherapy only to enter my protest against M. Faure's procedure. The improvement recorded in the two first recorded cases was not greater than would have come to the victims of his knife under the enforced rest and expectancy of the operation, and the sympathetic system is not so useless in the human economy as to justify such radical destruction. This, the death on the table of the third case operated upon, confirms.

I oppose this surgical procedure also because it is not only too destructive, but because it is not necessary, since exophthalmic goitre is almost invariably curable without the knife; at least it has been so in my hands under arseniated and phosphorated bromide and blood reconstructive treatment, with adequate nerve and brain rest and changed mental environment for the patient. But one of my cases in a neurological practice of thirty years has failed of recovery, and that was taken out of my hands markedly improved for the useless gynecological operation.

I note this progress in neurology to condemn it, though M. Faure considers his operation a justifiable procedure, and thinks chloroform did the fatality in one of his cases, and the knife, and not the neural rest and changed environment, improved the others. I could have cured them under the same treatment without the use of the knife. I object to this surgical procedure also because I think the vagus quite as much in fault in Graves' disease as the sympathetic, and it would be quite as justifiable to cut that as so much of the sympathetic cord as was excised in M. Faure's fatal case. Surgeons might call this progress in treating the nervous system for its diseases; neurologists will hardly agree with them. Surgery has not up to date regarded the human anatomy quite as conservatively as neurology. The sympathetic system of the cord should not be caused to perish, that neural surgery may live.

As the thyreogenic theory of Graves' disease has not been proved, neither the thyroid extract nor the thyroidectomy treatment has received any new support during the past year, except that thyroidin, as Roumeville has shown, improves growth and reduces obesity in cretins and myxœdemics, thus giving some apparent though not real color, through the benefit induced in exophthalmic goitre, to the hæmogenic over the neurotic theory.

Something has been added to the therapy of neuropathy during the past year. The suspension treatment of tabes, modified by recumbent knee-abdomen process and stretching of the sciatic nerve in sciatica, have passed from a great therapeutic expectation to their normal remedial limitations, and the much heralded massage cure for tabetics is now on the tapis to find the sphere of legitimate limitation during the coming year, as is the fate of all therapeutic fads.

Spermin (Poehl's *Deutsche Medicinische Wochenschrift*, October 7, 1897) has been used with benefit by Wesbitzky, of Prof. Payoff's clinic in St. Petersburg. One of his cases, a soldier of sixty years of age, after ten injections improved markedly in gait, posture, pains and perception (tactile and electric), etc. A second case, not so typical, improved, but not so markedly.

Many new cures for epilepsy have been emblazoned on the therapeutic horizon during the past year, but none have yet eclipsed the Brown-Sequard formula.

Among the latest additions abroad to the therapy of this disease is an old remedy long used in this country before the advent of bromides, viz., *Adonis vernalis*. Tekutiew, in *Neurologisches Centralblatt*, February, 1898, has recorded the case of a boy, aged ten years, who had suffered from severe epilepsy for two years, fifteen to twenty fits a day, and commencing mental degeneration. An infusion of *Adonis vernalis*, with some codeine and sodium bromide, was given, and the dose of *Adonis vernalis* subsequently increased. The attacks of epilepsy gradually diminished, and then ceased altogether. The treatment of *Adonis vernalis* was strongly recommended by Bechterew, who combined it with bromides, and found that some cases of epilepsy seemed to be permanently cured by it.

It will be noted, as I have taken occasion to remark elsewhere in the deliberations of this and other assemblages, that none of these newly vaunted remedies for the old disease enable us to dispense with the old reliable bromide treatment as the essential adjunct and really main agent in every valuable combination. We are learning that the patient, not alone the convulsions of epilepsy, requires treatment, and while a prudent therapy of epilepsy prompts us to minimize the bromides to the anti-spasmodic needs and vaso-motor demands of the disease, the period for the passing of the bromides in epilepsy is yet far remote, if, indeed, we shall ever be able to dispense with them entirely in this formidable affection of the brain.

Thyroid therapy has been much extended in its usefulness in neurology, but my twenty minutes' limit will not permit me to dwell at length on this subject.

The *Johns Hopkins Hospital Reports*, the *Journal of Psychology and Comparative Physiology* and the *Ophthalmologic Review* have contributed during the past year to neurological progress.

The after care of the insane, separate provision for epileptics, sequestration in hospital colonies, the increased attention given to the subject of asexualization for incurable and propagable and criminal neuropathic disorders, mark neurological progress during the past year and gives hope of the staying of that neuropathic plague which, like a silent pestilence, has followed and damaged civilization in its march since its emergence from barbarism.

The literature of psychiatry in this country has been enriched also by a book by Dr. Kellogg on "Mental Diseases," Dr. Chapin's "Compendium of Insanity," John C. Shaw's "Compendium of the Essentials of Nervous Diseases and Insanity," and S. V. Clevenger's treatise.

The advancing popular professional interest in psychiatry is further shown by the advent of Burr's "Primer of Psychiatry for Medical Men and Students and Trained Nurses," and the frequent contributions to the psychiatrial aspects of the practice of medicine and surgery from sources of clinical experience where, until lately, these subjects were ignored.

Psychological and neurological medicine during the past year has elicited unusual interest in the general medical societies of the country. Chas. E. Beevar and H. K. Lewis, and Mills and Dana, of this country, have, since last we met, brought out new books on the diseases of the nervous system.

The normal histology and pathology of the neurologia (so called) in relation especially to mental diseases, has been much elucidated during the past year by Dr. W. F. Robertson's report from the laboratory of the Scottish asylums, in addition to the contributions of other American and European asylums, especially the Italian. The *Monatschrift für Psychiatrie und Neurologie*, the *Allgemeine Zeitschrift für Psychiatrie und Psychisch-Gerichtliche Medizin*, the *Bibliographischer Semesterbericht der Neurologie und Psychiatrie*, the *Bulletin de L'Academie de Medecine*, the *Iconographie de la Salpetriere*, *Archives de Neurologie*, *Annales Medico-Psychologiques*, *Bulletin de la Societe de Medicine Mentale de Belgique*, *Archives de Physiologie*, *Journal de Neurologie et D'Hypnologie*, the *Revista Sperimentale di Freniatria e Medicina Legale Della Alienazioni Mentali*, *Revista Mensile di Psichiatria Forense*, *Antropologia Criminale e Scienze Affini*, *Annali de Neurologia*, *Il Pisani Gironale de Patologia Nervosa e Mentale*, *Brain* and the *Journal of Mental Science*, *West Riding Asylum Reports* and our own special periodicals, the *Journal of Nervous and Mental Disease*, the *Journal of Insanity* and the *Alienist and Neurologist*, the remarkably interesting Russian neurological journals, the late International Medical Congress at Moscow, the great Italian Congress of Freniatria of the last year, and the French, German, English and American psychological and neurological associations of the past and passing year, this special section of the American Medical Association and the current general literature at home and abroad, have enriched and advanced psychiatry and neurology on the whole to a degree not comparable by any previous year in the history of neurological and psychological progress.

Neurology has been especially advanced by further contributions to our knowledge of the anatomy and physiology of the nervous system and more correct pathological understanding through further advances of the neuron conception.

The neuron is a proved unit in physiological and pathological processes, and Lewellys F. Barker has done more than any other American during the past year to prove it.

Foster and Sherrington have embodied the discovery of Raymon Y. Cajal, and the later amplifications of this new light on the nerve centers, in a new edition of Foster's "Text-Book of Physiology." Dercum has offered some captivating conceptions thereon which do not yet appear as misconceptions, and Van Gieson continues his researches to the glory of American neurology.

I think it was Weindersheim who, in 1890, saw, or thought he saw, movement under the lens in an œsophageal ganglion of a living animal. The mobility of the neuron was suggested by Rabe-Ruckard and Lapine and Duval. Dercum's theory is a legitimate evolution and development.

Pierce Bailey's book, just from the press of D. Appleton & Co., on accident and injury in their relation to the nervous system, is the beginning of that surgical approachment between surgery and neurology which needs only to be supplemented by the forthcoming book from the neurological side on the relationship of the nervous system to accidents and injuries, especially in its pathological states, to make the union complete.

Neurology in its neuro-physiological and neuro-pathological aspect is destined to reunite all the specialties again to that general medicine from which they have been prone to become too much dissevered. We have progressed already to the point that binds neurology more or less closely to all clinico-medical and clinico-surgical problems. The labors of neurology in the medical advance of the nineteenth century have not been in vain.



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EDITORIAL DEPARTMENT.

Creosote in Pulmonary Tuberculosis.

Dr. Charles Lamplough, resident medical officer of the City of London Hospital for Diseases of the Chest, records in the *British Medical Journal*, of May 28th, his observations upon a hundred cases of phthisis treated mainly with this well known drug in emulsion with cod liver oil or spirituous solution, and also by inhalations mixed with an equal part of alcohol. He concludes that the best beechwood creosote can be given with benefit, in amounts varying from 120 to 240 minims daily. The dose should be small at first, but can be rapidly increased to 40 minims three times daily for an adult. In three cases, doses of thirty minims thrice a day were well borne by children. There is rarely any gastric disturbance from these large doses; on the contrary, the appetite is often increased, dyspepsia is lessened, and cod liver oil is more easily assimilated. The cough, expectoration and night sweats are

diminished, and the physical signs are improved. Creosote does not irritate the normal mucous membrane of the genitourinary tract, nor does it tend to cause, but rather to prevent hemoptysis. The drug is usually contraindicated in advanced cases of intestinal tuberculosis. On account of its much lower cost, the writer thinks that pure creosote is generally to be preferred to the carbonates of creosote and guaiacol.

The Relations of Gout to the Thyroid Body. It has long been known that there is an excessive excretion of alloxuric substances in the urine during and following attacks of acute arthritic gout. Rachford (*Philadelphia Medical Journal*, April 16th) calls notice to the fact that these same products are increased by thyroid feeding, which will even produce an acute exacerbation in patients suffering from chronic rheumatic gout. He also alludes to the not uncommon occurrence of acute attacks at the menstrual period, at which time the thyroid gland is unusually active. Thus there is good reason to suspect that the thyroid secretion has something to do with the abnormal body chemistry of acute rheumatic gout.

Pharyngeal and Laryngeal Nystagmus. In reviewing the literature of this rare symptom, H. Lambert Lack (June *Laryngoscope*) divides such cases into two groups. In the first, and by far the largest class, the movements are presumably due to severe nervous lesions, such as cerebral tumors, meningitis or tabes dorsalis. In the second group the soft palate or some of its muscles are affected, and the movements are apparently excited reflexly by some local catarrhal condition, nasal polypi or adherent crusts. The writer reports a case of this kind cured by proper local treatment.

A Modern Method of Treating Diabetes. On the ground that glycosuria is (except in pancreatic cases) the result of hyperemic over-action of the floor of the fourth ventricle, Beverly O. Kinnear (*Atlantic Medical Weekly*, June 18th) advocates for the amelioration and cure of diabetes the use of cold over the spine, combined with oxygen inhalations. The ice-bag, he says, should not be placed higher than the second or third dorsal vertebra, as the object in view is to diminish the amount of blood circulating in the brain, which is not accomplished if the cold application is above the region mentioned. The preparation best suited for

inhalation consists of two parts of pure oxygen, one of nitrous monoxide and 1 per cent. of ozone. The ice-bag should be employed for forty minutes three times a day one hour after meals. The oxygen is best taken standing and before meals, so that there may be no interference with deep inspiration. The writer advises two long inhalations from the cylinder at each treatment with an interval of two minutes between them.

**High Specific Gravity
of Urine.**

Ordinarily a specific gravity above 1.025 is due to sugar or relative or absolute excess of urea. That the chlorides may be the cause of the abnormal density is shown by a case reported by Dr. M. D. Hoge in the *Virginia Medical Semi-Monthly* for May 27th. His patient, a woman, passed in 24 hours 700 c.c. of urine with the extraordinary specific gravity of 1.120. There was no sugar or albumin present, and all the normal ingredients were in usual amount except the chlorides, which were doubled (27.6 grammes), while the urine was diminished one-half in quantity. By way of explanation it was learned that the woman ate largely of salt pork, ham and mackerel, and seasoned her other food with a considerable amount of salt. She rarely drank water, but used tea and coffee.

**The Importance of
Urinalysis.**

In his introduction to a projected series of lectures on urinary analysis (*St. Louis Medical Gazette*, June) Dr. Hugo Summa, Professor of Medicine in the Marion-Sims College, lays down the principles which have for years governed his practice in these respects:

1. Every treatment (even hygienic recommendations, such as cold baths) should be preceded by urinalysis.
2. When in the course of treatment specific medicines are used, urinalysis is required again and again.
3. As soon as the patient has reached the period of convalescence, especially before he is dismissed from regular medical attendance, urinalysis is absolutely necessary. (Remember, for instance, pyelitis after typhoid fever; suppurative nephritis after vaccination, or some weeks after osteomyelitis.)
4. The treatment of the various forms of nephritis, especially those most commonly associated with uremia, require urinalysis, partly to prevent uremic attacks, partly to control the therapeutic measures.
5. In all chronic cases the determination of nitrogen is necessary from time to time in order to investigate the nitrogen-balance as to nutrition.

6. All operative procedures requiring the use of chloroform necessitate the most careful urinalysis, not only for the detection of some form of nephritis or diabetes mellitus, but also of temporary insufficiency of the kidneys.

St. Louis Medical Gazette. A new comer into medical journalism bears this name. The editorial staff includes Martin F. Engman, Charles G. Chaddock, George C. Crandall, Carl Fisch, Frank L. Henderson, Phillip Hoffman, Bransford Lewis, Hanau W. Loeb, Norvelle W. Sharp, Albert S. J. Smith and George M. Tuttle. The first number is strong in original articles and department work. May the *Gazette* prosper as it deserves.

Examination for Gonococci. To prepare a specimen of urethral discharge for microscopic examination, Valentine, in the April *Clinical Record*, repeats directions for a common and reliable method.

1. Spread the discharge, filament or sediment as thinly as possible over the cover glass.
2. Let it dry under a bell-glass, to protect it from dust or air-microbes. This usually requires about three minutes.
3. Pass it three times through the opened Bunsen flame, with an even motion, to "fix" it.
4. Drop eosin (saturated solution in alcohol) upon the cover-glass and hold it over the closed Bunsen jet until a slight, visible evaporation results.
5. Hold it under a stream of water until all the eosin that can be washed away is carried off. If the cover glass stood on edge over filter paper gives it ever so slight a tinge, the washing has been insufficient and must be repeated until nothing but clear water comes from the glass.
6. Drop 2 per cent. methylene blue upon the glass, and let it rest so covered for five minutes.
7. Wash as described under No. 5, and mount for examination.

Diagnosis of Tuberculosis Hegar is quoted in *Pediatrics* as recommending bimanual vaginal or rectal examination. In this way, he says, small, often multiple nodules, the size of a hempseed, pea, bean or larger, can often be felt on the posterior surface of the uterus, in the cul-de-sac

Peritonitis.

and along Douglas fold, at the sacroiliac articulation and in the paravaginal tissues. These nodules are frequently somewhat movable and are either attached to the peritoneum or embedded in the connective tissue in the form of enlarged lymphatic glands.

The Infectious Period of Scarlet Fever. Dr. J. W. Washbourn, a prominent London bacteriologist, is credited by the *New York Medical Journal* as saying: "There is a general belief that the skin contains the virus, and it has indeed been stated that the patient is most infectious during the stage of desquamation. This latter statement is, however, incorrect, for there is evidence that patients are more infectious during the early stages than at a later period. While in some cases patients remain infectious for some time after desquamation has ceased, in many they are quite free from infectiousness during desquamation."

Melancholia and the Blood. An important practical contribution to the study of melancholia is that by Dr. B. C. Loveland (*New York Medical Journal*, June 25th) in which he gives the results of a blood examination of fifty-seven cases in the early stage. In nearly every instance the blood was unduly concentrated, ranging up to as high as 8,760,000 red corpuscles per cubic millimetre. The hemoglobin was also above the average—as high as 128 G. The rational treatment deduced from such findings is to promote elimination by every possible avenue—"Not forgetting that water is nature's solvent, and the most powerful aid in cleansing the system, and exercise its strongest ally." The patient should be fed according to the requirements of the body, as shown by clinical examinations. Lastly, only such medicines as are needed to complement the dietary and hygienic methods in securing sleep and promoting elimination should be employed. The results in the author's practice were that of forty-five patients thus treated, thirty-five recovered, eight were improved and only two received no benefit. The following is an illustrative case:

"Mrs. B., a widow, 52 years of age, came under my care on March 4, 1896. She was not very thin, though she had lost some flesh since she began to run down. Diagnosis was confirmed by a noted specialist. Melancholia began a year before she was sent to me. General characteristics conform to the description in the early part of this paper. Blood examination at the time of admission: Hemoglobin, 100 per cent. (Fleischl); red corpuscles, 5,780,000 to the cubic millimetre.

"Treatment directed was a diet mainly of milk and vegetable food, and phosphate of sodium, 15 grains in a glass of hot water, before each regular meal time, and two quarts of water to be drank during each day. Improvement was gradual but continuous, till she was quite recovered, and went home on July 5, 1896. At that time her blood examination showed as follows: Hemoglobin, 80 per cent. (Fleischl); red corpuscles, 4,920,000 per cubic millimetre. She came to see me in May, 1897, to show me how well she was, and up to the present reports still come of her continued good health."

It is a noteworthy and not contradictory fact that in the later stages of melancholia, so commonly seen in asylums, the long standing anorexia may greatly reduce the proteid elements of the blood as well as of the solid tissues, and in these cases iron, quinine and strychnine serve as useful adjuvants to forced fluid feeding. The writer calls particular attention to the constant difference in estimation by the Gowers and the Fleischl hemoglobinometer, the latter showing 85 per cent. when the former is 100.

Normal Salt Solution in Abdominal Surgery. Hunter Robb (*Columbus Medical Journal*, June 7th) has for the past eight years used salt solution for irrigating the abdominal cavity, and during the past three years has made a practice of leaving in this cavity from 300 c.c. to several litres of the hot normal solution, when not employing drainage. He is convinced that this procedure undoubtedly diminishes shock as well as the thirst of which patients so frequently complain after such operations.

The Blood Changes Induced by Altitude. In a recent address before the Philadelphia County Medical Society, Solly (*Philadelphia Polyclinic*) reviewed the essential facts of the subject. Mountain sickness has now been proved, he says, to be due not directly to lack of oxygen, but to diminished oxygen tension. It is also well established that when the oxygen tension diminishes the number of red corpuscles and the percentage of hemoglobin proportionately increase; such increase may be greater in an unhealthy than in a healthy person. At Colorado Springs the normal blood count is about 6,000,000. This gain is more than compensatory, as is shown by the fact that an individual after residing at a high altitude, on removing to sea-level, does not decline to his former subnormal blood count. Appetite and digestion are increased commensurately with the enhanced

power of the blood. In comparison with the blood changes the therapeutic effects of dryness, increased sunshine and lower temperature are of minor importance. The diminished blood pressure consequent upon a low barometer tends to relieve internal congestions and to mitigate, under certain conditions, aneurysms and heart lesions. It also accounts for the well attested clinical fact that hemoptysis is less apt to occur in a high than in a low country. With respect to the necessary length of residence at a high altitude for a consumptive, the writer concludes that, as a rule, sufficient length of time is not allowed. An interval of six months to a year is advisable, after all active disease process has ceased before the patient can return with safety for a permanent residence at his old home. Dr. Solly thinks, however, that when a patient is doing well, even though the disease may not be fully arrested, it is often of advantage to let him go home for a month—not longer, since after this period the increased blood power begins to decline. He is of the opinion that the permanency of cure at high altitudes is probably greater than when the disease is arrested at lower elevations.

**The Value, Limitations and Alternatives of
Topical Applications in Gynecology.**

Under the above caption,
Prof. E. C. Dudley, of the
Northwestern University

Medical School (*Philadelphia Medical Journal*, June 18th), freely criticises the principal procedures in local treatment, namely, the hot water vaginal douche, the tamponade and intrauterine applications. The douche acts in a two-fold way; as a vasometer stimulant lessening congestion, and as a cleansing agent to remove pathologic secretions. Its principal indications are in chronic pelvic inflammations and uterine hemorrhages. The indiscriminate routine use of the douche is of questionable propriety, on account of the washing away of the normal lactic acid germs, which render the vaginal secretion acid and thereby make it unfit culture ground for about 90 per cent. of all pathogenic bacteria. If the douche is employed at all, the rules of Emmet as to administration should be observed in every detail.

The vaginal tampon in the treatment of inflammation is designed to fulfill one or more of three purposes, namely, pressure, medicinal vehicle and drainage. The writer asserts that the pressure effect of the tamponage in displacements is better accomplished by massage, after Brandt's method. As a vehicle for glycerin or other depletant drugs, Dr. Dudley holds that the therapeutic value of the tampon has been much overestimated. If used at all, it should be

daily. Vaginal tamponage for uterine hemorrhage has two cardinal disadvantages—inefficiency and cumbersomeness. Intrauterine tamponage is a better treatment; it should be in the form of a continuous strip of aseptic or antiseptic gauze about two inches wide. It must be renewed daily.

Concerning intrauterine applications, the writer concludes that the treatment, as ordinarily applied, does not reach the disease, because of thick, protective coating of uterine secretions over the mucosa. Furthermore, he says, in the vast majority of cases for which it is used it is not only not indicated, but may even be injurious, through slight trauma setting up pelvic infection. The milder intrauterine treatment is long, tedious and useless. Caustics, including electricity, may stop the discharge, but at the same time inaugurate cicatricial changes resulting in stenosis or septic sloughing. Gradual dilation with the intrauterine gauze tamponade has been occasionally successful in the writer's experience, but great care is necessary lest the gauze, instead of carrying out septic matter, carry it in.

Curettage affords both a symptomatic and histological cure for the simple glandular forms of mildly infectious endometritis, providing, of course, that the disease has not progressed to the atrophic stage. The danger and uselessness of topical treatment in strongly infectious cases, says the writer, is so manifest that such treatment is not liable to remain common.

When the catarrhal condition is a general one dependent on a general infection, as after scarlet or typhoid fever, or on circulatory stagnation from disorders of the vital organs, or upon the various diatheses, uricemia, anemia, leukemia, chlorosis, diabetes, gout, rheumatism, or upon deficient function of the bowel or kidney—clearly in such cases topical treatment of the vagina or uterus are of no possible value. In such cases the rational treatment is purely a systemic one, for, as the writer remarks, if in a given case the whole intestinal canal and bladder and endometrium were catarrhal, it might be quite as logical to apply fuming nitric acid to all as to one—a *reductio ad absurdum*. The late Dr. Byford gave for many years as a routine remedy 1-20 grain of calomel thrice a day with enough mild saline to keep the bowels regular—to which simple plan of treatment it is not unlikely his pre-eminent success was largely due.

The writer concludes with the following italicized deductions: "If the above premises are true, it follows that a very large proportion of the women who formerly crowded the reception rooms

of the gynecologist for intrauterine and other local treatment should be treated by medical or surgical means or by both combined. If they do not present well defined indications for surgical treatment they should generally be referred to the field of internal medicine. The legitimate field for routine topical applications in gynecology is limited."

To Prevent X-Ray Burns. Charles L. Leonard (*New York Medical Journal*, July 2d) affirms that the patient may be absolutely protected from the harmful effects of the static charge by the interposition between the tube and the patient of a grounded sheet of conducting material that is readily penetrable by the X-Ray, such as a thin sheet of aluminum or gold leaf spread upon cardboard. In other words, so-called X-Ray burns are not due to the rays themselves, but to the ordinary electric discharge.

Electricity for Uterine Fibroids. Electrical treatment is specially indicated in the following classes of cases, says Franklin H. Martin (*Medical Fortnightly*, June 15th):

1. In bleeding fibroids in women approaching the menopause.
2. In all inoperable cases.
3. In incipient fibroids in women over 40 years of age.
4. In all bleeding fibroids of the smooth interstitial variety which have no symptoms but hemorrhage.
5. In all cases (not accompanied with pelvic pus accumulation) which refuse to have an operation.

The Tongue as an Index of Disease. Changes in the appearance of the tongue may be due to general or local causes, particularly mouth breathing and ragged teeth.

There is a tendency of late to neglect the tongue as a diagnostic factor, which is to be regretted. The following observations, which appeared in a recent number of the *Indiana Medical Record*, afford a practical summary of the clinical phases of this organ:

A broad, pallid tongue, with a loaded base, says atony and refers you to a want of action of the entire viscera below. The remedial agents would be cathartics and tonics, especially those mild, but effectual in character.

A shrunken tongue, pinched in expression, indicates functional inactivity of digestion, and requires great care in choice of food, as well as quantity. In this condition of the tongue we have atony also. It is the tongue of advanced fevers, inflammations of the

mucous membrane and want of assimilation; hence great caution both as to remedies and food. Here we must not use cathartics, through mild aperients may be carefully employed.

A contracted, pointed tongue, with dryness and dark fur, is the usual tongue of typhoid and other low grades of fever, when all thinking minds would use great care in the treatment and food. The dryness or moisture of the tongue denotes the extent of the disease of the intestines.

A fissured tongue points to the kidneys, either nephritis or insufficiency.

Yellow coatings are usually associated with morbid liver and want of biliary secretions and indicate mild hepatics and tonics.

Raised, bright red papillae denote irritation of stomach and of ganglionic nerves. They show exhaustion, no digestion and need of rest. We may give *nux vomica*, in 20-drop doses, and bismuth and pepsin after food, which should be warm and taken in small quantities.

A broad, thick, raw-looking tongue denotes a septic condition and favors typhoid fever. If deep red, sulphuric acid is indicated; if pale, sulphite of sodium. The food should be liquid and supped warm in small quantities. A septic state of the blood is indicated also by the dark red tongue and dark coating, by shades of dark brown and black, and by a pale dirty fur.

A tongue pointed, contracted, always moving and drawn to one side of the mouth denotes trouble with the nerves and perhaps the brain, especially congestion at its base. The tongue is likewise pointed and narrow in sluggish digestion and disassimilation from any cause.

Dry tongue denotes fever or inflammation, or an affection of the nerve centers of the ganglia. A thick tongue with edges turned upward, signifies atony of nervous ganglia, requiring stimulants, *nux vomica* or strychnine and quinine.

Differentiation Between False and True Albuminuria. In cases of pyuria to determine whether the albumin reaction depends solely upon the pus or partly upon a renal disorder, Martin and Taylor, in the American Text Book of Genito-Urinary Diseases, advise to take a small portion of the 24 hours' urine into which the pus has been intimately mixed, combine with an equal volume of $\frac{1}{2}$ per cent. solution of acetic acid colored with methyl-violet, and count the stained pus cells with the Thoma-Zeiss hemacytometer. With another specimen of the filtered

urine the albumin is estimated volumetrically in Esbach's albuminometer. One hundred thousand pus cells per c. m.m. corresponds to 1 per cent. of albumin, and a relative excess of albumin would imply a renal albuminuria.

In regard to blood, when the red cells in a well mixed daily specimen of urine do not exceed 3,000 per c. m.m., any albuminuria shown by the nitric acid contact test must be of renal origin. Another method is based upon the changed ratio of serum-albumin and globulin, which in renal albuminuria is 12 to 18:1. If amyloid kidney is excluded and the ratio is much lowered, as 2 to 5:1, a mixed albuminuria would be suggested. Should the proportion of globulin equal or exceed that of serum-albumin, the diagnosis of a blood-albuminuria is almost positive.

Death of Dr. Murrell. Dr. T. E. Murrell was in every sense a physician. Skillful and enthusiastic, far above the average. He early made an impress in the profession, and won a recognized place among the neurologists of America. He was, at the time of his death, professor of ophthalmology in the Barnes Medical College, of St. Louis, a chair he adorned with rare ability as a lecturer and teacher. He was clear, ready and full; always instructive and impressive, idolized by his class and esteemed by his colleagues. He enriched the literature of his department by many valuable contributions on diseases of the eye and had won, at the time of his death, an enviable place among his professional conferees.

He had come to Denver hoping to recruit his health, but his energetic spirit and indefatigable ambition to continue at work in his profession permitted him no opportunity for that rest of mind and nervous system so essential to recuperation and recovery.

On his first arrival in Denver he improved much and continued to improve for the first six months, but heedless of the necessity of rest, in order that he might accomplish this necessary repair his system needed, he continued his professional work; one of the common fatal errors of conduct with victims of tuberculosis in this climate, bringing with them the energies and aptitudes of the lower altitudes, and continuing the nerve strain habits of their former homes, they overdo themselves and die. Those who recover of phthisis pulmonalis in Colorado and most of those who make pilgrimages to this altitude for their health and succeed in getting well, adapt their habits to their new environments, abandoning or moderating their strains of business, vicious indulgence or depressing habits which made tuberculosis a possibility.

In the death of Dr. Murrell the profession has lost one of its most zealous and eminent men, cut off in the prime of life. He will be missed by a profession which can ill spare such ardent workers, and mourned by a host of friends.

He was a frequent contributor to the columns of the DENVER MEDICAL TIMES, and the editors of this journal extend to his bereaved family and his many friends their profound sympathy.

Gunshots Wounds of the Abdomen. Dr. J. C. Oliver, of Cincinnati, makes an important contribution to the literature of this subject in the *Lancet-Clinic* for May 7th. Of 58 cases there reported, 22 were operated upon because of penetrating wounds, and of these five recovered and the remainder died. It is a curious fact, says the writer, that all the cases corresponding to those which recovered with operation died when no operation was performed and similar cases to those which recovered without operation were attended with a mortality of 100 per cent. when subjected to operation. The conclusions of the author, from analysis of his own experience are as follows:

1. When in doubt as to whether a wound is penetrating or not, one is justified in enlarging the wound and following the track of the bullet in order to be certain upon this point.
2. When a wound is in a location where multiple injuries are apt to be inflicted upon the viscera, immediate operation is indicated.
3. In all cases of continuing hemorrhage after a gunshot wound of the abdomen, exploration should be made unless the patient is *in extremis*.
4. Gunshot wounds of the stomach, liver or kidney, in the absence of the signs of continuing hemorrhage, are more apt to get well without operation than with it.
5. A large proportion of these cases has no chance of recovery either with or without an operation, because of the nature of the injury inflicted.

The main point in the medical treatment of gunshot perforation of the stomach is to keep that organ absolutely empty, not allowing water to be taken.

An American Honored. Prof. C. H. Hughes, of St. Louis, who came out for the meeting of the American Medical Association as president of the section of Neurology and Psychology, and detained at the residence of his sister, Mrs. T. A. Hughes, on

account of the illness of his wife, has received a letter from Prof. A. Kojewnikoff, President of the Moscow Society of Neurology and Mental Sciences, notifying him of his election and enclosing the statutes and diploma of foreign membership of that society. By the statutes of that society, foreign members may be foreign physicians renowned by their scientific works in neurology and mental sciences.

A Bacillus that Stayed. In the *Johns Hopkins Hospital Bulletin* for May, Dr. G. Brown Miller reports the presence of the bacillus typhosus in the gall bladder seven years after typhoid fever. The patient had two attacks of pain caused by gall stones in the spring of 1891. These were followed within a month by an attack of what was presumably enteric fever. The gall bladder became infected by the specific germ, resulting in a chronic inflammation, which continued until the time of operation seven years later.

Sodium Phosphate Solution. The official sodium monohydric phosphate is of only limited solubility, requiring about eight parts of water. Various formulae have been devised to make more condensed solutions and hence more convenient for administration. Joseph W. England, Ph. G., of the Philadelphia Hospital, has used for something over a year the following formula (*Philadelphia Polyclinic*, May 28th), which makes a clear transparent, faintly acid stable liquid, mixing unchanged with water in all proportions, and yielding on thorough evaporation about 30 grains to the fluid dram of anhydrous salts: Dried and powdered (not granular) sodium phosphate, 3 oz. (Troy) 96 grs.; phosphoric acid (U.S.P. '90) 542 grs.; sufficient water to make 8 fluid ounces. The rationale of the procedure is the reaction between the salt and the acid forming instead of the monacid the diacid salt, which is more soluble. If it is desired to render the solution alkaline, the addition to each fluid dram of about ten grains of sodium bicarbonate will accomplish the result and at the same time produce a grateful effervescence. The best effects from sodium phosphate are obtained by giving it well diluted, three times a day, an hour before eating.

EDITORIAL ITEMS.

WM. OSLER, F.R.S.—Dr. Osler has been elected to membership in the Royal Society of England.

VOMITING OF UREMIA.—Huchard recommends lavage as the most rational treatment for this symptom.

TETANUS IN CUBA.—This affection is endemic in Cuba. An army surgeon observed 258 cases there in two years.

NUMBER OF EPILEPTICS.—It is estimated that one person in every 500 in the United States is afflicted with epilepsy.

ENLIGHTENED RUSSIA.—The Russian minister of public instruction has issued a decree forbidding the use of the corset as inimical to public health.

MANLY EGYPT.—The country of the Pharaohs is the only one in the world where the male sex predominates in numbers—the excess being about 160,000.

PATRIOTISM.—The Peacock Chemical Company, of St. Louis, announce that they will pay the stamp tax themselves without raising the price of their products.

RETENTION OF URINE AND HERNIA.—In children suffering from hernia, say the *International Journal of Surgery*, a very common symptom of strangulation is retention of urine.

TO REMOVE ADHESIVE PLASTER.—The *Georgia Journal of Medicine and Surgery* gives a practical hint in this connection by advising to pour on a little ether to dissolve the glue.

CALCIUM CHLORIDE IN HEMOPHILIA.—The results from this drug are said to be very brilliant in the hemorrhagic diathesis. Two or three grains, four or five times daily is the usual dose.

AN ARGUMENT FOR VACCINATION.—According to the *Medical Age*, vaccination is not compulsory in France, and since 1870 more than 20,000 people have died from smallpox in Paris alone.

DR. PAGE DEAD.—Dr. R. C. M. Page, professor of general medicine in the New York Polyclinic, and author of a practical work on the practice of medicine, died on the 19th of June.

THE MEMPHIS LANCET.—This new journal first draws blood this month—July. It is edited by ten of the leading physicians of the South, and is a very readable and creditable publication.

EDITORIAL MEETING.—The next meeting of the Editorial Association will be held in Columbus. Dr. J. E. Brown, editor of the *Columbus Medical Journal*, is chairman of the committee on arrangements.

TROPICAL DISEASES.—The June number of the *Monthly Cyclopaedia of Practical Medicine* consists largely of an exhaustive resume of tropical dysentery, tropical diarrhea and venomous bites and stings.

GASTRALGIA.—Ewald, in the *Medical Review of Reviews*, recommends a powder every two hours, consisting of $\frac{1}{4}$ grain codeine phosphate, 5 grains bismuth subnitrate and 3 grains of sugar of milk.

THE DOCTOR "THROWN IN."—A well known Paris newspaper announces that it has engaged a physician for \$480 per annum to give gratuitous advice to all purchasers of its illustrated weekly supplement.

CHILLS AND FEVER.—Whenever, says Welch, the temperature rises as high as 104° and the paroxysm lasts no longer than six hours, one is justified in the suspicion that the fever is not malarial in origin.

ANOTHER WART CURE.—The *Georgia Journal of Medicine and Surgery* says that they can be removed painlessly and without scarring by the daily application of supersaturated solution of potassium dichromate.

URIC ACID AND PREGNANCY.—Lithemic women often feel better than usual while in the pregnant state, a fact which is attributed to the more perfect systemic oxidation that takes place during this period.

PHILADELPHIA'S PUBLIC BATH-HOUSE.—Since the opening of this institution last April, says the *Polyclinic*, there has been an average of ninety bathers per day. Such undertakings are a mark of genuine civilization.

CAUTERIZATION OF INFECTED WOUNDS.—This rather common practice is, according to the *International Journal of Surgery*, a harmful absurdity. The wound should simply be well laid open and covered with a wet dressing.

WHAT THEY SAY OF US.—Without exception, so far as noted, the medical editors of America are a unit in according to the Denver meeting of the American Medical Association a place second to none of its predecessors.

WHERE ARE THE "AUNTY" VIVISECTIONISTS?—The daily press informs us that in London a consignment was recently received of a half million birds and parts of birds—quartered and ready to be hung on the ladies fall hats and bonnets.

ANOTHER NEW ELEMENT.—Professor Ramsey, the discoverer of helium, has isolated another gaseous element from liquid air, which he has named krypton. It is present in the atmosphere in the proportion of about one part to 10,000.

SACRILEGIOUS MICROBES.—The *British Medical Journal* states that Prof. Vincenzi recently traced four cases of diphtheria in Sassari—one of which was fatal—to the presence of Klebs-Loeffler bacilli in the "holy water" of a church in that place.

THE SWEETER SEX.—Figuratively speaking it has long been admitted in civilized countries that girls and women as a class have more of the saccharine quality than has the sterner sex. It remained, however, for Professor Schenck to discover that the generation of human females is merely a coincidence of maternal glycosuria.

A COLLEGE COALITION.—The Atlanta medical colleges have united to form the Atlanta College of Physicians and Surgeons. The union of these two schools was quite unexpected, as they were apparently extremely hostile to each other.

BLUE PILL FOR THE "BLUES."—Dr. Waugh believes that the "blues" are due to constipation and a sluggish liver, best corrected by a fruit and vegetable diet, cold morning baths, out-of-door exercise and cholagogues, such as aloes, podophyllin or blue pill.

SETTING OF PLASTER OF PARIS.—In place of the commonly employed sodium chloride, the *Indiana Medical Journal* recommends sulphate of potassium as being more efficient. It may be used in any strength—the stronger, of course, the quicker its action.

A SURGICAL HINT ON CLEANING THE HANDS.—The *International Journal of Surgery* advises to add strong ammonia to the water for washing—about half a teaspoonful to an ordinary basin being the right proportion. This will aid greatly in removing grease and blood.

BRAIN SYMPTOMS AND EYE-STRAIN.—Drowsiness is of quite common occurrence from this cause and may be the only symptom. Vertigo is still more frequent, is often accompanied by slight nausea, and is apt not unlikely to be regarded by the patient as a precursor of apoplexy.

TO DRINK OR NOT TO DRINK AT MEALS?—Ewald concludes that small amounts of fluids are beneficial, except for patients suffering from dilatation of the stomach. Ice cold drinks, however irritate the mucous membrane of the stomach, predisposing to acute and chronic inflammatory conditions.

CALLOSITIES.—For callous skin areas, Cantrell generally employs an ointment containing one dram of salicylic acid in an ounce of cold cream. This is applied continuously for forty-eight hours, after which the part is curetted, and the application renewed night and morning for several days.

DEATH OF MR. BLAKISTON.—After a long, successful and honorable career as a publisher, Mr. Presley Blakiston, of Philadelphia, died on May 21st at the unusual age of 85. The well known publishing house of P. Blakiston, Son & Co., which he founded, will hereafter have the name P. Blakiston's Son & Co.

THE OBSOLETE POULTICE.—*International Journal of Surgery* says: "Discard the old and dirty poultice, a remnant of somber ages. Absorbent cotton or gauze, soaked in hot water and covered with protective, is clean, will remain warm just as long, is more easily prepared, and more pleasant to the patient."

ETIOLOGY OF CHLOROSIS.—Charles E. Simon concludes, after extensive investigation, that this disease is a simple anemia due to insufficient consumption of animal proteids, and that the most satisfactory results can be obtained without medication from a diet consisting mainly of animal proteids, bone-marrow and dark beer.

CHLOROFORM DECOMPOSITION.—The *Therapeutic Gazette* calls attention to the rarely recognized fact that chloroform vapor is decomposed into chlorine and hydrochloric acid by the presence of the common gas flame, and may thus give rise to untoward irritating effects upon the respiratory organs of the administrator and surgeon.

SYSTEMIC TREATMENT OF TOOTHACHE.—Dr. Fred Coley asserts that 15 grains of sodium salicylate with the same number of minims of tincture of belladonna will often procure refreshing sleep instead of a night of agony. The salicylate is particularly useful in toothache due to catching cold, and may be given every four hours if, as is seldom the case, the first dose fails to relieve.

COLOR OF NEGRO BABIES.—*Pediatrics* quotes an eminent French physician as saying: "The negro baby comes into the world a tender pink color; the second day it is lilac; ten days afterward it is the color of tanned leather, and at fifteen days it is chocolate." These deductions were made among the blacks of Central Africa and do not apply to the half-and-half concoctions so common in this country.

MANUAL DILATATION OF THE UTERUS.—Grandin affirms that the hand as a dilator is the best obstetrical instrument at our disposal—better than Barnes' bags or any of the French instruments. In 98 per cent. of all cases, he says, the woman being within six weeks of the full term, and under surgical anesthesia, any man can dilate the cervix with his hand sufficiently to enter the uterus and extract the child.

ANOTHER "CURE" FOR TAPEWORM.—The *Medical Summary* recommends one drop of croton oil dissolved in 15 minims (30 drops) of chloroform, and one ounce of glycerine given at night on an empty stomach. This is followed in the morning by a sufficient quantity of castor oil to purge well, and the tapeworm—head and all—will come out with the purgative.

EARLY SYMPTOMS OF OSTEOMALACIA.—Rissman (quoted in the *New York Medical Journal*) describes three symptoms which are present before the softening of the bones is perceptible. The first is pressure sensibility of the bones, especially the lumbar vertebrae. The second is a vacillating gait or "goose-walk," due to paresis of various pelvic and femoral muscles. The third includes special subjective pains, either osteoalgetic or neuralgic.

COLUMBUS MEETING.—Dr. Starling Loving has been made chairman of the committee on arrangements for the next meeting of the American Medical Association, which will be held in Columbus, and Dr. E. W. Woodruff, assistant secretary. We understand that the Columbus profession have already started the good work and that the Columbus meeting is likely to eclipse all other meetings of the American Medical Association.

AMERICAN MEDICAL TEMPERANCE ASSOCIATION.—This society will hold its annual meeting in Prohibition Park, New York City, July 5th and 6th. The following officers were recently elected in Denver: President, N. S. Davis, Chicago; Vice-Presidents, J. B. Whitney, Jonesville, F. E. Yoakum, Shreveport, and J. Taft, Cincinnati; Secretary, T. B. Crothers, Hartford; Corresponding Secretary, J. H. Kellogg, Battle Creek; Treasurer, G. W. Webster, Chicago.

TREATMENT OF HAY FEVER.—On the ground of lithemic etiology, Gleason (*Atlantic Medical Weekly*, July) advocates the internal use of concentrated nitromuriatic acid, 3 to 5 drops, well diluted, after meals. He also advises the careful application to specially sensitive areas of a 5 to 10 per cent. solution of chromic acid and the daily washing of the nasal cavities with Dobell's solution, followed by the application of Lugol's solution in glycerine and a spray of albolene.

MERCURIC CHLORIDE FOR DIARRHEA OF CHILDREN.—The editor of the *Texas Medical News* states that when the child passes several pale, dirty looking and offensive stools during the day, with indigestion and flatulence, a teaspoonful every two hours of a solution of a grain of this salt in eight ounces of water is of great advantage.

HOW TO TAKE MILK WHEN YOU "CAN'T TAKE IT."—Dr. L. Duncan Bulkley states that fresh skimmed milk can be readily absorbed and assimilated in nearly every instance when taken on an empty alkaline stomach; that is, three or four hours after meals. There is no coagulation, "costiveness" or impairment of appetite when this method is followed.

A GOOD TONIC.

Thinking, perhaps, the physicians of Colorado were lacking a little in ability to write a commendable prescription for a good tonic for their anaemic and run-down patients, I take occasion to send you this one, which is said to be "fine" by the old lady who consumed two hours of the druggist's time in securing the necessary ingredients.

I said to her: "How do you prepare this medicine?"

She replied: "Take a pint of boiling water for each drug, steep for half an hour, strain and add one pint of alcohol, and it is ready for use." She then added: "I find this an excellent medicine and tonic for nearly all diseases."

The drugs entering into this composition are the following: Motherwort, elder, spikenard, hyssop, cherry bark, prickly ash, Virginia snake root, colts-foot, lobelia, wahoo, agrimony, yellow dock, blood root, gentian, mandrake, black cohosh, lady's slipper.—Dr. R. G. Woodworth, Pueblo.

BOOKS.

DISEASES OF THE SKIN.—Their Constitutional Nature and Cure. By J. Compton Burnett, M.D., Author of "Ringworm: Its Constitutional Nature and Cure." Third Edition, Revised and Enlarged. Philadelphia: Boericke & Tafel, 1898. Price, cloth, \$1.00 net; by mail, \$1.07.

This is a little homeopathic book on the systemic treatment of skin disorders. It is made up largely of reports of cases from the author's practice, and is written in a semi-popular rather than scientific style. We reproduce one clinical report as a sample: "The third case was that of a New York merchant, who suffered from liver and had come over to Europe to consult a physician, as he seemed to get no better from the treatment of his New York advisers. I found his liver very much enlarged, and also the before-mentioned sternal patch of skin disease. I gave him *Carduus* in like dose to the foregoing, and he came in a week declaring himself quite well. I advised him to remain a while under observation, to see if the cure proved permanent, but he hurried out of my room in great glee, and I never saw him again."

A SYSTEM OF PRACTICAL MEDICINE.—By American Authors. Edited by Alfred Lee Loomis, M.D., Late Professor of Pathology and Practical Medicine in the New York University, and William Gilman Thompson, M.D., Professor of Medicine in the Cornell University Medical College, New York. In Four Imperial Octavo Volumes. Volume IV.—Diseases of the Nervous System and Mind; Vasomotor and Tropic Disorders; Diseases of the Muscles; Osteo-Malacia; Rachitis; Rheumatism; Arthritis; Gout; Lithaemia; Obesity; Scurvy; Addison's Disease. 1099 pages, 95 engravings, and 8 full-page plates in colors and monochrome. For Sale by Subscription. Per Volume, Cloth, \$5.00; Leather, \$6.00; Half Morocco, \$7.00. Lea Brothers & Co., Publishers, Philadelphia and New York, 1898.

The present volume completes this really practical system of practical medicine—a production of which not alone the publishers, but the American medical profession as a whole, may justly feel proud. The diseases of the nervous system, of course, form the chief subject for discussion in this volume, the contributors comprising most of the best neurologists of this country, namely, Frederick G. Finley, M. Allen Starr, Christian A. Herter, Edward D. Fisher, D. D. Stewart, F. T. Miles, F. X. Dercum, Frederick Peterson, Charles L. Dana, William H. Thomson, James J. Putnam, Charles K. Mills, Morton Prince, Wharton Sinkler, William Broadus Pritchard, Willis E. Ford, William Noyes, Landon Carter Gray, Pearce Bailey and J. T. Eskridge. The last mentioned writer has for his topic "Cerebral Localization"—a theme which he treats with his usual clearness and thoroughness. The article on neurasthenia, by Putnam, is a complete and valuable résumé of modern conceptions and methods of treatment of this all too common affection. The disorders of the mind, constituting about one-sixth of the text, are considered mainly from a

clinical standpoint. The miscellaneous chapters at the close of the volume are among the most helpful in the system to the general practitioner. As was to be expected, A. Jacobi says all that is worth saying on rachitis. Rheumatism, gout, lithemia and the various forms of arthritis receive adequate attention from the pen of W. Gilman Thompson. The final chapter on Addison's disease, by Warren Coleman, is illustrated with a striking colored plate. The work now completed stands without a rival that is worthy of comparison. It furnishes to the practicing physician the maximum of the information he most needs at the minimum of expense. We cordially commend the work for its intrinsic value, practical utility and literary excellence.

HAY-FEVER AND ITS SUCCESSFUL TREATMENT.—By W. C. Hollopeter, A.M., M.D., Clinical Professor of Pediatrics in the Medico-Chirurgical College of Philadelphia. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut St., 1898. Price, \$1.00 net.

In the preface the author says: "Having had remarkable and uniform success with a simple treatment of hay-fever for the last ten years, during which time I have given complete relief to over two hundred patients in my private practice, and having made a thorough clinical study of this affection, as well as an exhaustive review of the literature relative to it, I feel justified in presenting the results of my labors in this short treatise." The treatment, minus details, consists essentially of the daily thorough sterilization of the nose and naso-pharynx, followed by the instillation of menthol in albolene, and combined as need be with suitable tonics to overcome the nerve-habit. The causes of the disorder are entered into quite thoroughly. An extensive bibliography, reaching back to 1565 A. D. is appended. The brochure will, no doubt, be welcomed by a large class of readers.

INFLAMMATION OF THE BLADDER AND URINARY FEVER.—By C. Mansell Moullin, M.D., Oxon, F.R.C.S., Surgeon and Lecturer on Surgery at the London Hospital; Examiner in Surgery at the University of Oxford. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut St., 1898. Price, \$1.50 net.

This monogram is the result of some years of special investigation along the lines indicated in the title, and is in effect an able plea for aseptic surgery and instrumentation of the genito-urinary tract. The author has drawn a good many highly instructive clinical pictures. His remarks on treatment are especially full and practical. The brochure is certain to do good in the practice of all who possess it and profit thereby.

A MANUAL OF GENERAL PATHOLOGY FOR STUDENTS AND PRACTITIONERS.—By Walter Sydney Lazarus Barlow, B.A., B.C., M.D., M.R.C.P., Late Demonstrator of Pathology and Examiner in Sanitary Science in the University of Cambridge, Etc. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut Street, 1898. Octavo; 795 pages. Price, \$5.00.

We have read this book with unusual interest and profit. The author is in no sense a faddist, and evinces on every page a well-balanced mastery of his subject. The underlying reasons of morbid processes, signs and symptoms are elucidated as clearly as possible according to the latest

scientific investigations. Where more than one probable theory is extant, the arguments for and against each is fairly stated. The interdependence and interrelations of pathologic changes in various parts of the body are pictured forth with graphic perspicuity. An extensive list of references is appended to each of the fifteen chapters, which are also preceded by short synopses of the subject. The manner and the matter of the work are both worthy of its motto: "Nil tam difficile quin quaerendo investigari possit."

DISEASES OF THE NERVOUS SYSTEM.—Handbook for Students and Practitioners. By Charles E. Beevor, M.D., London, F.R.C.P., Physician to the National Hospital for the Paralyzed and Epileptic, the Great Northern Central Hospital, and the National Orthopedic Hospital. With Illustrations. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut St., 1898. Twelvmo; 432 pages. Price, \$2.50.

The principal object of this manual, as stated by the author, is to enable students and practitioners to know how to examine patients suffering from diseases of the nervous system, and assist them to marshal their facts in a definite order. In accordance with this commendable design, two of the twenty-nine chapters composing the text are devoted to the "Method of Taking a Case" and "Modes of Examination." All the functional and organic diseases of the brain, spinal cord and nerves are described tersely but systematically. The general anatomy and physiology of the nervous system are described at sufficient length for clinical purposes. The text is illustrated with twenty-eight diagrams and photogravures and a number of plates of sensory localization. The book is one of Blakiston's Practical Series and is a useful addition to the physician's working library.

SELECTIONS.

"Robinson's Lime Juice and Pepsin" is an excellent remedy in the gastric derangements particularly prevalent at this season. It is superior as a digestive agent to many other similar goods. (See page 33, this issue.) See remarks on their Arom. Fluid Pepsin also.

Epilepsy—Clinical experience of hundreds of physicians has proven that "Neurosline" (Dios) is almost a specific in epilepsy. Dose, two teaspoonfuls, three times a day, modified as the case warrants. Reliable results can not be expected if substitution is allowed.

Biddeford, Me., June 25, 1898. Kress & Owen Company, New York City. Gentlemen: Am using Glyco Thymoline (Kress) in my family, and daily prescribe same for rectal diseases as well as for nasal catarrh and inflammations with excellent results. Will extend its use to diseases of mucous surfaces in general. Yours truly, H. Reny, M. D.

"Hagee's Cordial of Cod-Liver Oil Comp. is the most palatable preparation of cod-liver oil which I ever prescribed, and is, in addition, the most effective."—Ohmann-Dumesnil, Professor Dermatology and Syphilology in the Marion Sims College of Medicine of St. Louis; Consulting Dermatologist to the St. Louis City and Female Hospitals; Dermatologist to the Alexian Brothers' Hospital, Pius Hospital, Rebekah Hospital, etc., etc.; Editor St. Louis Medical and Surgical Journal, Quarterly Atlas of Dermatology, etc., 5 Broadway, St. Louis, Mo.

A Sheet Anchor—On September 10, 1897, a well-known New York physician of The Third Avenue Cable Railroad Company returned to the New York office of The Norwich Pharmacal Company ninety-four one-pound empty Unguentine jars. In a letter accompanying the jars the doctor says: "The jars I return to you represent the number of pounds of Unguentine I have used since December 1 last. I have from twelve to fifteen cases a day—motormen, conductors and stablemen—suffering from slight wounds, abrasions, cuts, bruises and burns, and about the only treatment I make is to give them a small box of Unguentine. It is certainly my sheet anchor in practice, as in every instance it heals all the above cases quicker than anything I have ever used."

True Americanism—Physicians and pharmacists, like the masses of the people, have tired of the arrogation of superiority implied by the announcements of foreign manufacture, and are revolting against them. This spirit is especially commendable at the present time, when a vast wave of patriotism is rolling over the land, making the North and the South, the East and the West as one band of brothers by its magic influence. The Antikamnia Chemical Company, of St. Louis, in all of its advertising matter, whether through the journals or by circular, takes particular pains to impress upon physicians and pharmacists that its goods are made in America, by Americans, and for American use. This enterprising company realizes that the words "Made in Germany" or "Made in France" no longer possess the influence and meaning they once had. The people of this country no longer scorn or underrate the products of their own native laboratories and workshops.—*The National Druggist*.

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ORIGINAL COMMUNICATIONS.

SOME COMMON ERRORS IN GYNECOLOGICAL PRACTICE.

By HENRY P. NEWMAN, A.M., M.D.,
Chicago, Illinois.

Carelessness in handling routine cases is one of the commonest errors in the practice of this branch of medicine.

This embraces mistakes in diagnosis, negligence in taking case histories, lack of attention to the details of treatment and instructions given to patients, and failure to appreciate the importance of prophylactic supervision over the life and habits of women.

It is a common error to make a superficial diagnosis. A certain train of symptoms is presented by the patient, an examination made and a laceration of the cervix discovered. To take this as the cause of the patient's trouble, and direct treatment solely to the laceration is careless diagnosis, and yet too often this is the course pursued. Local treatment or surgical procedure is directed solely to this indication and as a result the patient is more often injured than benefited. Whereas, a cervical laceration may primarily give rise to a series of complications and changes in the surrounding structures which break down a woman's health, it by no means follows that to repair the laceration will cure the resulting evils. On the contrary, the operation of repair, if unaccompanied by auxiliary operations upon the pelvic structures, may be positively mischievous. Thus I have not for many years found a case of cervical tear which had existed for any length of time, where there had not also occurred other structural changes demanding operation, and where to sew up the cervix and leave a large,

heavy and displaced uterus, with chronic metritis and endometritis, and probably more or less inflammatory implication of the adnexa, would be to hamper Nature's efforts rather than help.

Before the canal is lessened as an avenue for drainage, the endometrium should be thoroughly curetted, the uterus replaced and kept in place by the method best suited to the individual case, and all other pelvic lesions presenting should be repaired. This should all be done at one sitting, and I may say confidently that in all cases of laceration presenting symptoms, it will be found that nothing short of such multiple operating will produce a cure, for the symptoms are not the result of the laceration in itself but of the complications to which it has given rise. It is an error to rely on any single plastic operation to cure a generally disordered pelvis.

In this connection it is well to emphasize a warning against another common error, that of relying on the diagnosis of another without personal verification. What I have said in regard to carelessness in diagnosis and plastic surgery is well illustrated by a case which came under my observation recently.

I was asked to advise in the case of a woman who had been under the care of a physician at a distance. I did not see the patient, but this history was given me. The physician in charge had made out a laceration of the cervix and had called in a surgeon to operate. After the operation, which was a simple one, the patient did not rally as had been expected, but seemed to be much worse, and in the course of a few days presented alarming symptoms. The surgeon applied to me and I suggested that there was probably some pelvic complication which had not been observed.

An examination was made with this view, and a ruptured tubal pregnancy discovered.

Another man, a young physician, consults me in regard to a member of his family who is lying ill in bed and rapidly losing ground and yet the only diagnosis made, the only treatment used, is of and for lacerated and eroded cervix.

Such incomplete operating and careless diagnosing is worse than useless to the patient and brings more or less discredit or adverse criticism upon the profession. And here let me say that a very common error is an error of judgment as to what

constitutes conservatism and what radicalism in surgery. The saving of life alone is not all of true conservatism, nor the end and aim of medicine. By one well-directed procedure to save to a patient years of health and opportunity may be radicalism, but it is in many cases better conservatism than that which hesitates and palliates and delays at the expense to the woman of months and years of invalidism and suffering. Invalidism is bad for the individual, the family and the nation. Neglect of the proper opportunity for surgical help has not only cost many lives, but it has added to this great army of helpless members of society, many who might have been restored to health. The years which the elder Keith has added to the sum of human usefulness have been computed in the thousands, and they stand as a monument to the glory of true conservatism.

Of course, a certain proportion of invalid women owe their condition to their own neglect or wilfulness and not to that of the physician who may have done his best to persuade them against their disinclination or fear. Neither do I wish to be understood as implying that topical and palliative treatment have no place in gynecological practice. But that they have grown to assume too great prominence in this branch, particularly in the view of the laity, I am quite convinced. The average office patient is apt to rely upon the ingredients of the various injections and douches she may be ordered to use, and upon the various manipulations of the physician rather than upon the principles underlying the applications. For instance, the more common agents employed in routine treatment are the hot vaginal douche and the tampon. The use of hot water is valuable when properly applied, as a vaso-motor stimulant and as a cleansing agent. The requirements for its use are the recumbent position of your patient with the hips elevated so that the water is retained in the vagina sufficiently to distend that organ to its utmost, before discharge; the length of time not less than twenty minutes, twice daily; the temperature should be gradually increased from day to day; the recumbent position should be maintained for at least half an hour after the douche, and its use continued for weeks or months, persistently. As commonly used, in the sitting posture, at irregular intervals, with water at indifferent temperature and in small amounts, with no rest afterward, the woman believing

that the antiseptic used with the water contains the healing virtue, the douche is of little benefit.

Its misapplication as a therapeutic agent may also be positively disastrous, as in those cases where there is local infection of the external genitals. The douche point may be the means of carrying the infection to the upper canal and thereby inflicting grave injury on the pelvic structures. Also, whereas in many cases of inflammation the accumulating secretions require washing away with some mild antiseptic solution, there are many cases where the safeguard of the normal vaginal secretion with its bactericidal power is essential and constant flushing with water is mischievous.

The improper use of the tamponade is a frequent cause of failure in gynecological treatment. The tampon is indicated as a hemostatic, as a support or compress and as a carrier of medicinal agents.

For hemostatic purposes within the uterus the first requisite is a patulous or dilated cervical canal. Iodoform gauze or wicking should be packed firmly in the upper part of the uterus with an appropriate instrument, a pair of dressing forceps such as these which I have devised for the purpose, with slender and tapering blades.

The lower segment of the cavity should be less firmly packed, and a strand or two of the material should project through the cervix into the vagina. A tampon so placed is efficient in controlling hemorrhage from the uterine cavity, in securing contraction of the organ and in providing limited drainage. When used in the vagina the same precautions should be taken, firm packing in the upper portion around the cervix, and looser folds in the lower, otherwise it may be expelled or become exceedingly painful and interfere with the functions of bladder and rectum. Its usefulness depends entirely upon its proper application. As a carrier of medicinal agents, and as a support it is equally valuable or useless according to the manner of applying, the material used and the aseptic and antiseptic care of the operator. In most instances it is a mistake to allow it to remain in situation more than twenty-four hours, as it may become a hot-bed for germ propagation, and the common method of applying, once or twice a week, can accomplish little good and much harm. The same applies to

topical applications in general. To paint over the endometrium, cervix uteri or vaginal vault with the usual medicinal agents, iodine, nitrate of silver, carbolic acid, etc., once or twice a week is a delusion and can not, beyond its germicidal action, produce any results other than destruction of tissue by cauterization.

It is claimed that the electric current has especial virtue as a topical application, but it is in the same category as those just mentioned and depends for its effect upon its cauterizing power. Better results can be obtained if curette is substituted for all of these things, and more safely, as the operator can better control the technique of the procedure and regulate the amount of action he wishes, whereas with caustics, electricity, etc., the extent of the effect is uncertain and hard to limit. Making local applications to the endometrium except following full dilation of the cervical canal is a very questionable procedure, and yet a few years ago electricians recommended the use of a very small, flexible, intra-uterine electrode for the tortuous canal leading to the large cavity of a myomatous uterus. The usual result of this kind of work was infection of the endometrium with extension to the tubes, ovaries and pelvic peritoneum, complicating a condition already grave enough. It should not be necessary to say very much upon aseptic and antiseptic methods in gynecological practice at the present day, and yet we know that many women are still infected by septic instruments and appliances used in the general tract. The responsibility for this state of things is no doubt in careless preparation of the patient before treatment, and a too superficial cleansing of the hands and instruments of the physician.

Unremitting aseptic and antiseptic vigilance should be as much the rule in the office as in the operating room.

The same may be said in regard to obstetrical work. One of the gravest errors that can be listed is the careless handling of obstetrical cases and abortions.

This may not seem to be strictly in line with a gynecological subject, but as I wish to speak particularly of the importance of prophylaxis in gynecological work, I can not avoid mention of the great part this plays in the causation of gynecological disease.

Clean obstetrical work is of prime importance in eradicating many of the diseases common to women, all meddlesome

interference should be deprecated, and the lying-in chamber conducted with the same strict attention given a surgical case. It would seem hardly necessary to make such a statement in the light of present knowledge, and yet the numbers of women who suffer in consequence of improper management of childbirth and the puerperal state are sufficient evidence that iteration and reiteration are still called for. And as for abortions—our clinics and hospitals are filled with victims of unscientifically treated abortions. Not to mention a large percentage of cases which have been conducted without the help of the physician, the self-induced and criminal abortions, there is still a great number who owe their condition to the fact that the significance of abortion has not been properly appreciated by the profession. The idea prevails to a considerable extent, in fact, it is taught by some, that abortion is but the anticipation of a normal event and should not be interfered with, that nature will take care of the case, and that expectancy is the indicated treatment. But the fact is, abortion is not a natural process, and with none of her forces in proper condition for the event, nature unaided is inadequate to the occasion, and does not accomplish satisfactory restoration. Abortion is a pathological occurrence and should be so treated from the first. Where the event is inevitable immediate emptying of the uterus is called for. Dilatation, curetting, touching with an antiseptic solution or swabbing with carbolic acid and tamponing with iodoform gauze or wicking should be done, and if this is carried out under an anæsthetic, with strict attention to details, there will be no further cause for anxiety unless infection has, as I have pointed out in a paper read before the American Medical Association at its last meeting,* already occurred, in which case the treatment is appropriate and timely. As for prophylaxis, not to appreciate its importance and urge it upon patients, is to neglect one of the highest privileges of our profession and to fall short of our duty to the public.

It is the province of rational medicine not only to heal but to prevent disease, and the sociological training which is being given students in most of our progressive institutions of learning is directing general attention to the responsibility of medical science to society. The foundation of all disease and

*The Journal of the American Medical Association.

suffering as well as of all happiness, is to be found in the circumstances of every day life. Man was fitted by nature in the beginning to enjoy the same measure of physical perfection that belongs to every created being, and it is only through the adverse conditions of his civilization that he has lost his pristine health. How to regain a normal and physiological standard of health without sacrificing any of the real benefits of an advanced civilization is the problem which most concerns the science of medicine to-day.

As gynecologists we have seized upon the largest horn of the dilemma when we have undertaken to look after the health and physical possibilities of womanhood. To accept without question the dictum that woman is the weaker sex, and by birthright destined to a life of weakness and suffering is to admit the inherent imperfection of the race and the inadequacy of creation's masterpiece, inasmuch as the physical condition of the mother must reflect itself upon all her children. Whether the researches of such modern thinkers as Havelock Ellis and others are conducted on accurate lines, or are more fanciful than exact, and whether or no woman was once really man's equal in physical strength as she is now his superior in nervous endurance, it remains a fact that she ought to be far other than she is to-day, and it is the duty of this branch of our profession to raise the standard of female health. When we look for the cause of our patient's sufferings do we not find them written all over the daily record of her social and domestic life? When we remember the conditions under which she has gained her education, entered society and matrimony, can we say to her conscientiously, "Your sickness is a dispensation of Providence, and the ways of Providence are mysterious?"

And do we do our whole duty in simply prescribing for the symptoms of disorder, and neglecting to point out the errors of life which continue to augment the trouble? What a woman eats, what she wears, how many hours a day she works and worries, and how many hours she rests and recreates, these are things that must be regulated before her treatment can be called rational. It is not possible to reform the whole race of womanhood at once in regard to matters of dress, diet, etc., but constant advice and education of the individual will do great things, and in the end universal progress will be gained, and if

it is more difficult for the ordinary woman of mature years to give up her superfluous clothing, her wires and whalebones and steel bars, corsets, high heels and top-heavy hats, than for the leopard to change his spots, it is not such a task when it comes to the supervision of girlhood.

Before these prejudicial habits are formed they may be prevented by judicious advice to the intelligent girl and to her parents.

The ambition of parents and teachers has over-reached itself on the side of the intellectual advancement, and now a generation of bright but puny children calls for a revolution of existing school methods, and for reconstruction of home life. The larger institutions, colleges and universities in our cities furnish our private hospitals with a class of gynecological cases which owe their diseases to over-study and insufficient exercise, poor food and poorer methods of dress. Within the past year, at the Marion-Sims sanitarium, I have had to operate for pelvic lesions upon several bright young students and teachers, who should have been enjoying the perfection of healthy young life, and whose troubles could all be traced to the conditions which custom and a too exacting system of study had forced upon them. These and a small army of young girls whom I see daily in office practice, and you see everywhere throughout the country, suffering at the outset of their career impaired functions from imperfectly developed organs, conditions which will influence their entire after life and which can not be corrected by any after treatment, however carefully applied. The disordered pelvis may be repaired to some extent, malpositions be corrected by skillfully devised operations, inflamed and diseased tissues healed or taken away, but no amount of professional skill can encourage in after years the normal growth and development which belong to the formative period of puberty. It is robbing not only the individual but the state to deprive the embryo mother of the advantage of healthy and vigorous growth which is the portion of the years of adolescence, and this branch of medical science is party to the evil when it fails to impress upon society, early and late, the vital importance of the period of puberty to the after life of the woman.

103 State street.

THE CURSE OF MERCURIC BI-CHLORIDE.

By HERMAN E. PEARSE, M.D.,

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Two facts that for many ages held the attention of the medical profession have been solved near the close of the nineteenth century. One was the nature of the poison causing infectious and contagious diseases, and the other was the nature of the second began the battle royal of the antiseptic against the former came the vast growth of quarantine and hygienic principle, and the thorough control of yellow fever, small pox, cholera and other plagues and scourges, that in the past have been to us such a dire affliction. With the solution of the second begun the battle royal of the antiseptic against the germs. Following Lister with his carbolic acid spray, many of the brightest minds of the day have perfected and applied some chemical formula by which the deadly germ could be destroyed or some method of technique by which it could be excluded. A long list of those chemical combinations have been presented to us, and volume upon volume of surgical literature has been written and published concerning their use and application. All this is known as antisepsis.

Equally active has been the work of perfecting means of technique by which the germs of infection might be successfully excluded, thereby allowing healing to take place, with no necessity for the application of any chemical solution that would kill germs. This ideal procedure is known as asepsis. It has settled down to a fixed rule that antisepsis is a preliminary to asepsis by means of which infectious fields are cleaned, foul instruments are cleansed, hands that look clean are made to be clean, germs lurking under cover of epithelial scales, and in the recesses of hair follicles and sweat glands are destroyed, and by the same process, infected areas where normal tissue is already invaded by disease producing organisms are made healthy and the work of granulation allowed to proceed without hindrance. By common consent, however accurate or in-

accurate may be the conclusion, the bi-chloride of mercury stands easily at the head of all antiseptic drugs employed. We use it on the surface as a disinfectant, rinse our hands in it, mix it with our soaps, use it as the chief factor in ointments, use it in sprays and douches, rinse our instruments in it (sometimes to their utter ruin), and on all sides depend upon this safe drug to stand between us and the deadly microbe in whatever form it may be present. Probably no other agent has accomplished so much in the world for the prevention of disease, unless it be carbolic acid, and even here the outcome of comparison is in doubt. Do we use it too much? Yes. Do we trust it too much? Yes; trust it so far that it becomes to us sometimes a hindrance and an obstacle, in that it lulls us into a false security, and becomes to the patient in our charge a veritable curse and a thing of evil instead of the saving agent for which we intend it. How often do we hear remarks such as this: "My patient was confined on Monday, on Thursday I found she had had a chill and some temperature; I do not see how this could have happened, for I used bi-chloride;" or like this: "This patient's wound showed on the second day a zone of inflammation, and soon after marked signs of pus formation; this must have been due to the fact that cat gut was used; the wound and my hands were clean, for I used the bi-chloride;" again like this: "My patient sustained a compound fracture; I washed the wound carefully and closed the opening; suppuration set in promptly; I do not see why, for I used bi-chloride in dressing it;" again we will see such a case, a true one, as this: "A hydrothorax had been tapped by trocar; the pleural cavity became infected; the patient was having repeated chills and high temperature; wasting of flesh was in progress; the doctor recognized that his wound was infected and seemed about to break and discharge, yet he busily kept gauze saturated with the all-powerful bi-chloride over the wound until a good surgeon showed him his error, resected a rib, drained the cavity and saved his patient. The error in all these cases is a blind, superstitious faith in bi-chloride. The drug is all right, but its use was all wrong. Like the savage who trusts to his charm of painted feathers which he wears dangling down from his neck, these enlightened accoucheurs dispensed with the proper and complete use of soap and water, and instead of thoroughly clean-

ing their hands, dip them in bi-chloride; this careful surgeon in dressing his patient's wound, having dipped his hands in bi-chloride, does not hesitate to scratch his head (thus loading his finger nails with microbes) or to pick up a chair, for had he not used bi-chloride, and was he not therefore safe? And this compound fracture that needed such careful cleaning, such thorough scientific drainage; to which every principle of surgery learned through a thousand years of war and accident should have been applied; in this case all this was neglected, because forsooth bi-chloride was at hand, and bi-chloride kills germs. Had there been no bi-chloride within reach, drainage would have been established in the pyothorax and no time lost. Bi-chloride of mercury is one of the greatest blessings the surgeon has to-day, but it is not all-sufficient; cleanliness, hot water, soap, good drainage, careful surgical principles, are as necessary as ever, and as frequently render the use of any anti-septic unnecessary. With all its excellence, with all the value that attaches to bi-chloride, with all its indispensable characteristics, yet must it be said, much as we value it, that by blind reliance upon its power to kill germs, a valuable agent is every day converted from a blessing into a curse and a nuisance.

312 Rialto building. Kansas City, Mo.

IMPRESSIONS OF DENVER.

By DR. C. A. HUGHES,
St. Louis, Mo.

[As dictated to the reporter for the DENVER MEDICAL TIMES.]

The clear sunshine, pure air and pure water of Denver, the latter chemically pure and late judicially decided, challenge the admiration of the sanitarian visitor and ought to give her own fortunate citizens a large amount of contentment with their lot. Besides this, the broad, clean, well shaded streets, beautiful, well irrigated lawns, and cool, somnolent night breezes from the snowy mountains near by, ought to satisfy the most

[Dr. Hughes, as everybody knows, is a neurologist with a world wide reputation and has visited Denver many times, and while we regret to say that we do not agree with him in all points pertaining to the water question, yet we know that his impressions will be read with much interest by the profession throughout the country.—EDITOR.]

cynical searcher after the cool comforts of existence in summer time. In fact, everything appears lovely in Denver and the altitude is high, while the water rates, for the amount consumed by her people, are low. If the quantity of water used by a people, as soap is, is a measure of civilization, Denver is the most highly civilized of cities, that is, if testimony on the subject is reliable as elicited in the great water case just decided, *The City of Denver vs. The Denver Water Company*, in which it was shown that the people of Denver annually consumed more water per capita than the inhabitants of any other city on the habitable globe. No other city than Denver has had the purity of its water supply judicially decided. Her sand filters and settling reservoirs are supplemented by a legal decision on this subject, and it was not settled with feverish haste, either, though Judge LeFevre settled it. He and the lawyers took four years to decide it, and Denver's water supply is as good as the best in the world, and her doctors and people ought now to be happy. Denver is quite as well watered as some of her mining stocks in the mountains, but under a somewhat better system.

Besides Denver's own pure water supply with its maximum of mineral salts and minimum of organic matter in solution, there are her contiguous highly sanitary springs that specially interest the physician seeking health resorts for his patients, like the soda springs and the iron springs of Manitou in the vicinity of Colorado Springs, and the vapor caverns and waters of Glenwood.

The medical man of to-day is much a medical counselor, advising how and where health may be regained through new environments when medicines miss their therapeutic work, when patients' spirits fall into melancholia and old and too familiar surroundings become, in sanitary sense, uncongenial and depressing.

The same summer temperature as that common to the valley of the Mississippi in the same parallel of latitude, being accompanied here with a clear and dry atmosphere and more rapid evaporation, causes less depression of the sweat and other nerve centers and of necessity fewer sunstrokes, if any, in extreme hot weather, because the body surface is kept cooler by rapid cutaneous transpiration. Ordinarily arrested perspiration precedes *coup de soleil*.

The soil of Denver is sandy, exceedingly porous and comparatively free from malarial alluvium. It dries readily and does not emit much noxious effluviæ.

Denver and its environs ought to be an excellent summer resort for those who seek rest with their hot weather recreation rather than excitement and overwork. The eastern summer tourist to Colorado seeking to refresh and rebuild himself for a vigorous return to the work he wishes to resume at home in the fall should content himself to submit to the restful life this climate inspires and not be too prodigal on first arrival of the newly acquired energy he may get from the Colorado dry, pure air and life giving sunshine.

It strikes me that there are salutary and unsalutary ways of living in Colorado as there are in every other health giving climate. One of these salutary ways to live is to adapt the system by comparative physical inaction for awhile and abstention from fat meats, alcohol and other carbohydrates to the rarefied atmosphere here while the skin, lungs and kidneys become normally adapted to their new environment. There is certainly a better way as well as a bad way to live in this remarkable climate, which men learn by experience and physicians by observation. If one is not well immediately after arriving here he should consult a Denver doctor and have his habits of living examined into and not blame the climate. It seems to me to be not a good climate for high livers or hard drinkers, especially on short acquaintance with it, though I might here explain that I do not class myself among these. The wine-bibber and the gourmand ought not to expect to flourish in it.

Rheumatic attacks may occur here in strangers owing to the rapid transitions from hot days to cool nights in summer time and the marked differences between the temperatures of shade and sunshine coupled with the wearing of thin cotton underwear of the East, but the sunshiny weather soon drives away this trouble under good medical management.

Why some people sleep well on arrival and others poorly I have not with satisfaction made out, unless the fact is inherent in the vasomotor and other neural adaptability or non-adaptability of individuals; the vasomotor system through paresis thereof of some persons permitting the cerebral blood

vessels to dilate and delay or disturb sleep more than in others. An individual cerebral hyperæmia and vagus irritability ought to be easily brought about by the rarefied atmosphere of the higher mountains hereabout, hence the medical injunction of caution in ascending to the higher altitudes.

After a time an equable vascular condition comes about in the brain, especially under the judicious prescribing of bromide of sodium by the physician, as I observed with patients who accompanied me to Colorado Springs some years ago and with patients coming to me at St. Louis from this state with insomnia and neurasthenia, returning to Colorado and continuing well. I think it is possible for nervous people to be benefited in this climate provided they forego much exertion while under treatment. It is a specially appropriate climate for the rest cure. There is nervous depression and irritability in most consumptives, yet they do well under proper medically regulated conditions here. The night sweats of phthisis is an expression of neuratrophia and nervous exhaustion. Asthma is a spasmodic neurosis that improves in this climate, and I have seen grave neuritides develop in it and some more serious organic nerve troubles. An ataxic miner who once came to me from the Gunnison country afforded me some amusement by revealing his ruling passion for gambling. Although he was a hopeless ataxic and his life was made miserable by his lancinating pains and uncertain sight and gait, when he saw from æsthesiometric examination that he could not discriminate the two points placed on his wrist two inches apart, and was told that at certain distances nobody could answer correctly with eyes shut, he wanted to buy the instrument, saying he could make a fortune out of it in the mines, for any one would be willing to bet they could do it.

The reception of the American Medical Association more than sustained the reputation Denver medical men and all of her people have throughout the Union for hospitality.

The public buildings of Denver, especially her court house, public schools, hospitals and hotel buildings, reflect great credit on the public spirit, liberality and enterprising progress of her people. That this is a goodly city and a goodly people goes without saying.

Pure air is always the same in chemical composition, but a volumetric study by competent authority of Colorado atmosphere and its comparison with that of other health resort localities ought to prove of value to the advisory and prescribing physician. The therapy of atmospheres and sunshine have not yet been exhaustively studied.

APPENDICITIS.

By JOSEPH EASTMAN, M.D., LL.D.,

Professor of Abdominal Surgery, Central College of Physicians and Surgeons,
Indianapolis, Ind.

The last word on appendicitis will not have been spoken until truth, which lurks between extremes of error, is more in evidence. The dictum "operate in every case as soon as the diagnosis of appendicitis has been made," smacks more of solicitation of business than solicitude for human life, and is scarcely less pernicious than that horrible compromise "surgery where medicine fails." The former would make an emergency of every operation, the latter would make every operation one of emergency.

WHEN TO OPERATE.

Great wisdom is requisite to know how to operate, but infinitely more to know when to operate. The operation of expediency, done by the right person, at the right moment and in the right way, is much to be desired. We are often able to confirm the diagnosis of the general practitioner, who knowing that surgery is essential to the cure of a surgical disease, has invoked our aid at the earliest possible moment. We find a change for the better at the end of twenty-four or forty-eight hours. We direct that the bowels be sterilized inside by free purgation with salines. This prepares the patient for operation, or further improves pulse and temperature, and enables us to select a time when infecting germs are weakened; enables us to select a place where we can procure absolute asepsis; enables us to secure an operation of expediency with almost no mortality.

Some theories to the contrary, appendicitis is at the onset caused by microbic infection. Surgical dissemination of the infection can not be prevented unless we give due consideration to such sound surgical principles as have been built upon bacteriology, referred to, and confirmed by, the crucial test of clinical experience.

The invasion of the peritoneal cavity when acute infection is present will always be taking a risk which is not taken when

bacteria have been weakened by maceration in their own excreta. Had we some subtle diagnostic acumen which would enable us to select the moment for operation in every case, prior to the rupture of the appendix and the escape of infecting germs, it would be well, but the diagnosis having been made, to operate at the moment when infection following the ruptured appendix is most virulent, is to accept a danger which it is possible to avoid. What experienced abdominal surgeon would think of operating during the acute stage of a pelvic peritonitis, involving tubes and ovaries? Again it has been proven that the most poisonous forms of bacteria may escape through the walls of an intestine weakened by disease, catarrhal inflammation, fecal impaction, etc., without rupture.

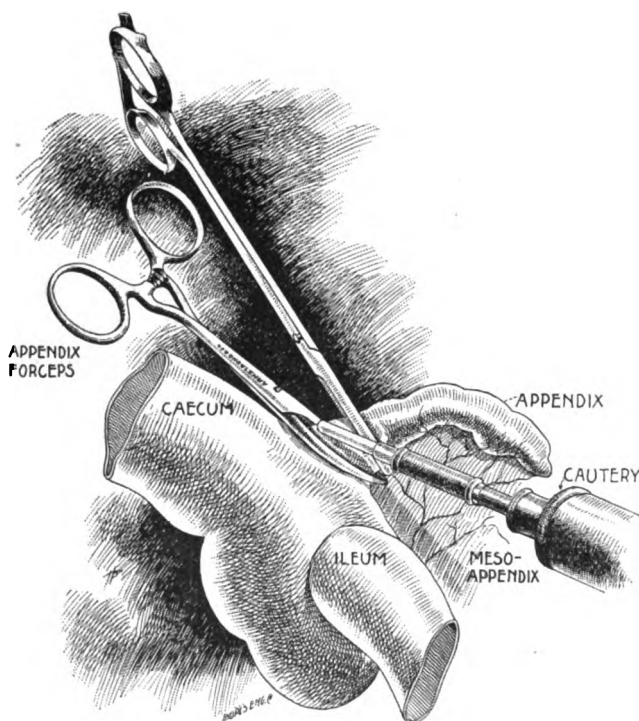
Admitted: Operation is the remedy for appendicitis. This should be impressed upon the physician and he again should impress it upon his patients. It should also be impressed upon them that a large per cent. of cases come to the abdominal surgeon sooner or later and that they had better come to him sooner than later. I mean by this that the physician should have a competent operator to confer with him at the very onset of the case, but by no means that the surgeon should operate at that time, except when the exigency of the case demands an emergency operation with its higher mortality. My opinions are based more upon the results of my work, and the work of such masters as MacBurney, Hunter McGuire, etc., than upon fickle theories or fancies, so common in the seidlitz powder surgical literature of the day. Here the law holds good that the adaptation of the remedy to the particular stage of the disease contributes in no small degree to our success. Delay may be advisable for three reasons: First, to prepare the patient better for the operation, and perhaps transfer him or her to a suitable hospital; second, to secure the advantages of an operation of expediency as against one of emergency—to operate in the interval of an attack; third in cases where the pulse, tympanites and general condition of the patient make it clear that operating would only give the newspapers a chance to publish a "death from a surgical operation." I have not yet been accused of surgical cowardice, but have known deaths due to procrastination after an operative procedure had been advised, the delay being clearly traceable to the libelous statement in a newspaper that

"a death was caused by an operation," the reporter of the sensational item not taking into consideration the almost dying condition of the patient caused by the disease for which the operation was advised, nor that the heroic surgeon was willing to sacrifice reputation, the outgrowth of a long life's work, to give a fellow being the only chance of life, nor that he might have stated to the friends that he could only offer one chance in a hundred by surgical effort. To operate on a hopeless case, and through the medium of the newspapers, cause fatal delay, thereby sacrificing perhaps three precious lives which surgery could have saved, forms a question which the conscientious surgeon may well take into consideration.

TECHNIQUE OF THE OPERATION.

To my mind there are two distinct operations: First, that in which we may reasonably hope to secure the appendix and remove it; second, that in which we simply open an abscess, drain it, and wait (until a suitable time at which time infection is less acute and then remove appendix and close the cecum). In abscess cases I am in the habit of making the incision in the usual place, a little nearer perhaps to the anterior superior spinous process of the ilium, cutting down to the peritoneum, but not through it, and then with a pair of curved scissors or with a knife with a long crooked handle going down between the "weather boards and the plaster, under the kitchen floor, then turning the instrument sharply, break through the floor under the cook-stove." The peritoneal cavity is only opened under the cecum where the pus is most frequently found, and at the point where the appendix has infected the parts. I get the best of drainage for pus and serum, and have seen portions of appendix washed out from such a cavity as that. In this way I do not go directly into the peritoneal cavity, nor do I expose the area of intestines to the pus from the abscess. I would protest most emphatically against any undue amount of search for an appendix unless there is intestinal obstruction, when the wall of abscess must be broken to find the cause, which may be only paresis in nerves of the inflamed area. The length of time the abscess has existed should be considered. The plastic exudate which walls off the pus may not be strong, or having been strong may have become weakened by contact,

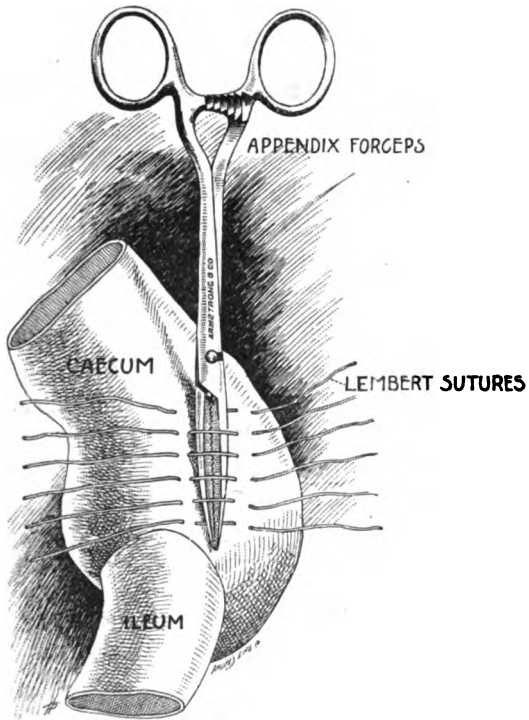
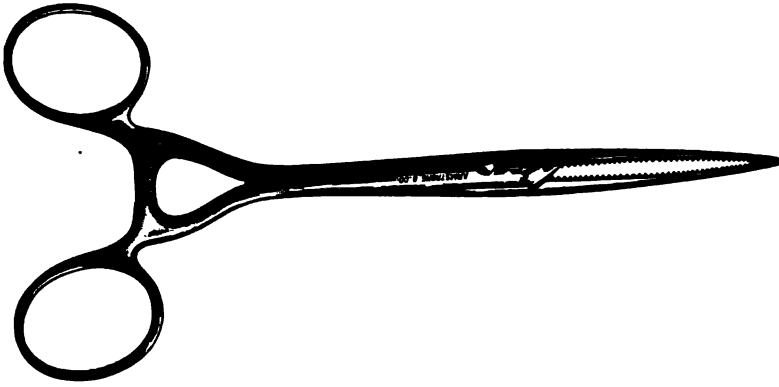
decomposed pus breaking down the wall, and allowing the pus to escape into the pelvic basin or up the "water-shed," between the ascending colon and abdominal wall. When the abscess contains old pus it is less dangerous to hunt for and remove the appendix than when infection is acute. When it has been necessary to simply open, drain the abscess, etc., without finding the appendix, I am of the opinion that the greatest safety to the patient lies in keeping the patient under close observa-



tion, and as soon as acute infection has passed, say three weeks, not waiting for a second recurring attack,* to open the abdomen, break up adhesions and deal with the cecum and appendix by the technique I here describe. This opinion is backed by a large experience and emphasized by a case of fatal hemorrhage from cecum, and by a case where the second attack was nearly fatal.

Dr. A. W. Patterson and Dr. Hodges, of this city, Dr. Ross, of Kokomo, Dr. Newcomer, of Tipton, and others are familiar

*You might as well trust a dog with your dinner, as a ruptured appendix with the life of your patient.



with illustrative cases. With this reasoning all the cases cured by medical treatment should be cured over again by operation at the proper time, as the danger of operating in the interval of attacks is less dangerous than the leaking appendix; a recurring attack ending fatally without operating, or with it, if the same is done in an emergency.

I object to tying off an appendix under any circumstances or leaving any stump of appendix within a ligature, nor would I approve of cutting off a piece of the cecum until the forceps have closed the wound and sterilized it by heat. I clamp the base of the appendix including a portion of the cecum. The forceps should have a very slender jaw, with edges beveled so as to form a groove when they are closed, in which the cautery slides, until their blades are heated to a blue heat. The bevel on the under side prevents cutting the serosa of the cecum where they compress it.

The appendix is then severed with a cautery, while the cecum is being held with forceps, not with fingers. The cautery is rubbed on the forceps jaws until the tissue in their grasp is desiccated (cooked). From five to seven Lembert sutures are carried through the cecum over the forceps jaw into the cecum again.

Then the forceps are unlocked and withdrawn from under the sutures, which draw the cecum together over the (cooked) cicatrix. In this way we have a complete closure without any stump whatever.*

After the appendix has been severed with the cautery the meso-appendix is transfixed and tied so tightly with fine silk as to arrest bleeding from the artery of the meso-appendix. It will be found much more convenient to ligate the meso-appendix after than before the appendix is severed. With this technique, the area about the work can not become infected from cecum or cut appendix, as is sometimes the case when we are working to invert or cover over the stump with peritoneum. I have completely inverted the entire appendix many times and

*If there is a portion of the appendix infected, it is all infected, and nearly always a portion of the cecum in and about the cecal orifice of the appendix, is infected or ulcerated.

In many instances where I have opened an abdomen the second time, the "button" beyond the constricting ligature on the pedicle is not to be found. Any "button" left beyond the ligature on an appendix must be cast off and infect the serous membrane which has been used to cover the stump. Again, the vitality of the cecum near the appendix is impaired by depriving it of blood, when we ligate the vascular meso-appendix to control hemorrhage from its artery.

tried nearly every technique, but step by step have evolved and used this method with much satisfaction. In every abdominal section I ask after the health of the appendix, and if the blood vessels are prominent on the outside, I conclude there is microbic infection with catarrhal inflammation on the inside and it is removed. Holding the cecum with these forceps obviates the handling of the serous covering of intestines and wound, and the additional operation scarcely adds a danger to our other work.

The following conclusions are warranted by our observation and experience:

First—The unqualified dictum, "operate as soon as the diagnosis of appendicitis is made" is unsound, unsafe and often pernicious.

Second—Appendicitis is a disease demanding surgical treatment at the hands of the expert in abdominal work for the reasons: (a) In no abdominal operation is so thorough mastery of the principles and technique of asepsis necessary. (b) The operator with an experience of hundreds of abdominal sections can give the patient a better chance of life than one who occasionally opens an abdomen. This need not deter any surgeon or physician from operating in an emergency.

Third—After an attack of appendicitis the patient is carrying an open communication between the intestinal lumen and the peritoneal cavity, which if temporarily closed, may open at any time by absorption of the exudate, or adhesions which have temporarily closed the leaking sinus.

Fourth—The cases cured (?) by medicine should, during their convalescence from the cure (?), be submitted to a surgical cure in fact, not in fancy, for the reason that operation in interval of attack is less dangerous than medical cures.

Fifth—All cases in which an appendical abscess has been opened come under the same head as medical cures (?) and demand surgical cure in fact, not waiting for a second explosion of dynamite.

Sixth—Who would think of living in a house with a bursted, leaking sewer, sending out microbic infection and poison, depending on the debris of filth, feces and fungous granulations or accumulations to hermetically seal up the opening. It would be contrary to all the best principles of correct science of good surgery and of sound sense.

Seventh—"Surgery should be as the hand-maid of medicine, not supplanting her mistress nor yet usurping her rights, but rather assisting her to maintain them."

METALORGANIC HEMATOTHERAPY.

By DR. E. C. HILL,

Denver, Colo.

Iron is the life of the blood, as it is of the leaf. It is the ferryman of the miniature boats that carry oxygen to the ever hungering tissues. Though constituting but one-hundredth of one-hundredth of the total weight of the body, it is not out-ranked in vital importance by any of the other sixteen corporeal elements.

Dried hemoglobin yields .42 per cent. of iron. The hemoglobin content of a given quantity of blood can be estimated directly from the amount of contained iron, but the color tests are commonly employed because of their much greater convenience.

Oligochromemia, or diminished hemoglobin, is observed in a large number of morbid conditions. In chlorosis the decrease is marked both absolutely and relatively to the reduction of the number of red cells—a pathognomonic feature. In the secondary anemias, such as complicate tuberculosis, infectious fevers, gastric ulcer or malignant disease, the diminution of coloring matter is parallel with the oligocythemia. In progressive pernicious anemia, on the contrary, there is relative excess of hemoglobin, or a high color index. Hemoglobin reduction is noticed further in leukemia, pyemia, typhoid fever, obesity, rachitis, hepatic cirrhosis and renal dropsy. The rare state of absolute hemoglobin excess is met with in pulmonary stenosis and at times in diabetes mellitus.

The symptoms pointing to deficiency of iron in the blood are those of chloroanemia, namely, fatigue and breathlessness on slight exertion, cardiac palpitation, vertigo, syncope, continued headache worse on standing than lying, neuralgias, persistent pain in the splenic region, backache, apparently causeless nausea and vomiting, and amenorrhea or dysmenorrhea. Slight fever is a not uncommon accompaniment. The pulse is rapid, full, soft and compressible, but usually regular. There is persistent pallor in all cases, varying from the simple lack

of color of secondary anemias to the greenish yellow tinge of chlorosis, or the smooth, waxy, lemon tint of pernicious anemia. Slight dropsy is not uncommon, beginning almost invariably about the ankles. The hands and feet are often cold and clammy. Soft or loud but distant basic systolic murmurs are frequently observed, and the humming top murmur over the right jugular is highly diagnostic. Hysteria and neurasthenia are familiar complicating affections.

To restore the blood to its pristine normal state we must first of all devote earnest attention to the elimination of causal factors, whether simple malnutrition, intestinal autointoxication or infectious heterotoxemia. The cardinal remedies are fresh air, sunshine, rest and abundant nourishment of the proteid class, particularly eggs, milk, red meats and bone marrow. Cakes and pies and candies are to be eschewed as baneful in the extreme. Make the bowels move if they don't of their own accord, drink at least three pints of water daily, go to bed at 9 o'clock after a cold salt sponge bath and a rough rub-down. And withal take iron.

When we consider the fact that an ordinary beefsteak contains as much iron as is in the human blood current, it would seem a very easy matter to repair any deficiency thereof. Clinical experience, however, demonstrates that it is not altogether what we take into our stomachs that feeds us, but rather what is taken into the blood. While almost every physician uses iron in some form in the treatment of anemias, each is apt to differ somewhat in his preference among the forty-three official and numerous non-official preparations of this metal. An old favorite has been the tincture of ferric chloride, which on account of the free hydrochloric acid it contains, is a valuable stomachic tonic in cases of hypochlorhydria. On account of their acid constituent, the mineral salts of iron are generally astringent and constipating in action; in large doses they are quite irritating and have even proved fatal. The hypophosphite and iodide of iron are useful chiefly as vehicles for the metalloids which they represent. Of the mineral acid salts of iron the pyrophosphate is probably the least irritating and is said to be non-constipative. Metallic compounds are commonly absorbed into the blood as albuminates; hence the advantage of taking them in milk.

The organic salts of iron include a number of scale preparations, which are readily soluble in water and do not irritate, constipate or affect the teeth injuriously. Two of the most pleasant of these are ammonio-ferric tartrate and potassio-ferric tartrate. Another favorite, especially when a diuretic is indicated, is the *mistura ferri et ammonii acetatis*, or Basham's mixture. This is particularly useful in the albuminuria of pregnancy. Still another and unofficial preparation which has commended itself to a great number of American physicians, both for theoretic reasons and because of nearly universal favorable clinical results, is the *liquor mangano-ferri peptonatus*, or as abbreviated, "Pepto-Mangan" (Gude). In addition to the peptonate of iron it contains the peptonate of manganese, a normal element of the human constitution, and one which, as is well known, exerts a specific effect upon functional uterine and ovarian affections. The chief advantage of this combination is, of course, its ready absorbability.

An article of this kind would be quite incomplete without a mention of ferrous carbonate, so largely prescribed for many years in the form of Bland's pills.

DISEASES OF THE FALLOPIAN TUBES.*

By W. W. GRANT, M.D.,

Denver, Colo.

The object to be attained in the treatment of disease of the female generative organs is not alone to cure the disease, but, in doing so, to preserve the functions of maternity and the mental stability of the patient. Disease of the tubes is not only a dangerous condition, but frequently results in sterility. It is not an idiopathic affection—uterine endometritis is the usual cause, and whatever means will prevent or most quickly and promptly cure the latter disease can only tend to the prevention and cure of the former. Sepsis following abortion, labor, operations or gonorrhoea usually causes the serious forms of endometritis, and by extension of the disease, salpingitis.

*Abstract of paper read at the meeting of the American Medical Association, June, 1898.

The virulence of the gonococci in endometritis is not often acute even at an early period of the disease, the indications being much less pronounced than in the acute vulvo-vaginal, urethral and cervical forms and is generally overlooked. Sanger says that about one-eighth of all gynecological diseases is due to gonorrhœa. There are usually no immediate constitutional or peritoneal evidences of the disease, which are so common in puerperal sepsis. In ordinary septic endometritis the wise and accepted rule of treatment is to clean out all debris and foci of infection by curettage and irrigation, ordinarily supplemented by gauze drainage. While in the gonorrhœal form there is practically no early treatment—on the ground that to curette the uterus at this stage is to open up fresh channels and increased area of infection and cause more certain extension of disease to tubes and peritoneum.

The wisdom of this delay and method is much to be doubted. I believe it better in theory than practice. The uterus is not in the soft receptive state of the puerperium and yet the mortality from puerperal sepsis has been greatly diminished and should practically be abolished by early gentle curettage, irrigation and drainage. In the gonorrhœal form thorough and deep curettage is specially indicated because the utricular glands are deeply affected. In such cases apply also such a mixture as iodine and carbolic acid and antiseptic gauze for drainage and there need not be fear of aggravating the disease.

The surgical principle involved is the same in all—to remove the diseased tissue which is the nidus and source of infection and to place the parts in the best possible condition for drainage, and thus prevent further infection. This is the dictum of modern surgery and I believe it should prevail in the early period of gonorrhœal as well as in puerperal infection. It is usually during the period of declension of the primary specific inflammation, which in the adult is not ordinarily vaginal, that the endometrium becomes affected and no reason, in my opinion, exists for any unusual risk in curetting at such a time.

I have treated in this manner cases of gonorrhœal puerperal sepsis, uterine and tubal, acute and chronic and I have only to be pleased with the results, among them two recent cases of acute undoubted gonorrhœal purulent salpingitis in which there was not the occlusion common to such cases of either the

uterine or abdominal ostium of the tube, recovery taking place by drainage through the uterus, though this condition is usually surgical and pyosalpinx always. Both patients had small tumors at the site of left ovary and doubtless contained pus. I expected it would be necessary to operate on both later by vaginal incision or laparotomy, but to my surprise both recovered in seven or eight weeks. A year's observation demonstrates complete recovery in both. In neither was the right tube involved. I have treated cases of catarrhal and interstitial salpingitis by dilatation, curettage and gauze drainage with most gratifying results. In fact, this is the best treatment, using in addition such other local and constitutional means as may be indicated or that might be appropriate to the case.

Such treatment is useful in some cases of purulent, though not in cystic salpingitis. It is not, as a rule, deemed wise in the acute form, yet I believe it true that rough examinations and manipulation of the parts, and pulling the uterus down, thus stretching unduly the inflamed organs and tissues, do more harm than gentle curettage of the uterus and the application of antiseptic gauze for drainage.

As the endometrium is the usual channel by which disease invades the tubes, we should in all cases, infectious and non-infectious, give the former prompt and earlier consideration than is frequently accorded, and this is especially true of gonorrhœal cervicitis and corporeal endometritis, which not being attended with severe acute manifestations is generally overlooked, and if observed at an earlier period should be treated by curettage and drainage, with the object of not only curing more quickly the local disease, but to prevent the extension of the disease to the corporeal endometrium, tubes and glandular tissues. The left tube is more frequently affected than the right. With unilateral disease the tendency of such treatment is to prevent the extension of disease to healthy tube and ovary, which should never be sacrificed unless destroyed by disease.

Drainage is not a positive necessity after curetting an aseptic uterus under aseptic conditions, but I have always used antiseptic gauze nevertheless and have never had occasion to regret it. In two or three hundred cases of curettage, some of them septic, but most of them not, I have not seen an unpleasant result from its use. Penrose, in his recent excellent

work, says that "gauze is liable to obstruct the escape rather than favor drainage of discharges from the uterine cavity, and that elevation of temperature and uterine pain are often caused by it." I believe it is the general experience of surgeons that no better drainage material than gauze exists for use in the peritoneal cavity and appendical abscesses, and I am quite confident that most of those who have used it extensively for uterine drainage are favorable to its use, especially in septic cases. Yet if it should produce fever by not draining the aseptic uterus, its use would be inappropriate in the septic, and I am confident in the belief that this is not in keeping with the experience of most operators. I have long been convinced that antiseptic gauze is by all odds the best material at our command for draining the septic uterus, it not only keeps the cervical canal patent, but maintains a germicide and drainage material easily and comfortably in direct contact with the whole diseased and infecting tissue and drains effectively by capillary action. Of course, if it should be permitted to remain longer than three or four days in any case it may become saturated with mucus and will not then drain so effectively. Depending on the case, it may require removal in twelve hours. Its effect is to deplete the uterus and appendages by rapid osmosis, indicated by a free discharge, and in a marked degree promotes involution. If the uterus is well dilated, well curetted and the gauze is inserted properly, gently filling the cavity of body and cervix and protruding into the vagina, no one need have any apprehension or disappointment as to its use. In this paper I have specially refrained from reporting and discussing the plainly operable cases of tubal disease.



ITEMS OF INTEREST.

How to Get an Insurance Applicant to Urinate.—In cases of inability to micturate because of nervousness in the presence of the medical examiner, Dr. George W. Wells (*Medical Examiner*, July) advises to turn the faucet at the wash-bowl and let the water run. The sound of the running water has a peculiarly soothing effect in these cases, and often induces the individual to pass his water when he could not have done so otherwise.

Osteopathic Territory.—Doc Still's leg pullers have now the legal right (a moral wrong) to practice their devices in ten states of the Union, namely, Colorado, North and South Dakota, North Carolina, Iowa, Illinois, Kentucky, Michigan, Missouri and Vermont. If any illiterate ignoramus wants to be a doctor and practice medicine without taking the trouble to learn anything about it—all he or she needs to do is to become an osteopath.

Habitual Borborygmus.—The editor of *Medical Brief* affirms that the severest cases are promptly relieved by the application of a snugly fitting abdominal bandage. To effect a permanent cure, however, a long course of treatment will be required—including digestives, bitter tonics and mineral acids, combined with a systematic and regular course of gymnastics to develop the muscles of the trunk and especially those of the lower abdomen.

Height and Weight of Infants.—Calculations made by Professor Burk (*Pediatrics*, July) show that the average length of a new-born male infant is 19.68 inches—of the female, about one-fifth inch less. The average increase during the first year is probably between seven and eight inches. The average weight at birth, male, may be put at 7.3 pounds, and of a female at 7.1 pounds. This weight is almost trebled in the first twelve months of life.

Toothache of Hunger.—In some persons, says Richard Grady, in the *Maryland Medical Journal*, hunger will excite markedly disagreeable sensations in the teeth. A case is published of a gentleman who, while convalescing from typhoid fever, was seriously annoyed by painful sensations in two of his molars whenever he became hungry. The pain was sufficient to rouse him from sleep, and could not be allayed except by the introduction of food into the stomach, when instant relief followed.



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EDITORIAL DEPARTMENT.

The Smegma Bacillus. An exhaustive article on this subject, by Dr. J. L. Miller, in July *Medicine*, concludes with the following summary:

1. Over the entire surface of the body and exposed mucous membrane, and especially on the genitalia, bacilli are found which resemble morphologically and in tinctorial qualities the bacillus tuberculosis.

2. From the external genitalia they frequently gain access to the urine, especially in women, and may be a source of error in the examination of urine for tubercle bacilli.

3. The smegma bacillus presents wide variations in size and form, thus rendering morphological differentiation frequently impossible.

4. While most smegma bacilli are more readily decolorized by any of the solutions commonly employed,

occasionally they possess equal or even greater resistance than the tubercle bacillus.

5. Methods of decolorization where acids are employed alone are especially fallacious; acid alcohol or dilute alcohols, unless long continued are equally unreliable. Better, but not free from error is the use of absolute alcohol for at least five minutes; in ammonical urine, however, such prolonged use of alcohol may also remove the stain from the tubercle bacillus.

6. Attempts to remove the fat or fatty acids from the bacilli by ether, chloroform or other solvents fail to furnish us with a means of differentiation.

7. We must rely on means of excluding the smegma bacillus from the urine. It has never been demonstrated in the bladder, and apparently seldom invades the deep urethra; therefore, by cleansing the external meatus and withdrawing the urine with a catheter we can exclude this possible source of error.

Infantile Scurvy in North America. The report of the American Pediatric Society's collective investigation upon this subject appears in the *Philadelphia Medical Journal* of July 2. It covers 379 cases seen by 138 observers. Three-fourths of the committee, namely, J. P. Crozer Griffith, Charles G. Jennings and John Lovett Morse, arrive at the following conclusions:

1. That the development of the disease follows in each case the prolonged employment of some diet unsuitable to the individual child, and that often a change of diet, which at first thought would seem to be unsuitable, may be followed by prompt recovery.

2. That in spite of this fact regarding individual cases, the combined report of collective cases makes it probable that in these there were certain forms of diet which were particularly prone to be followed by the development of scurvy. First in point of numbers here are to be mentioned the various proprietary foods.

3. In fine, that in general the cases reported seem to indicate that the farther a food is removed in character from the natural food of a child, the more likely its use is to be followed by the development of scurvy.

The Early Recognition of General Paresis. In concluding an article on this subject, Sachs (*New York Medical Journal*, July 9th) states that among the first symptoms the evidences of mental derangement are of greatest importance, for on the strength of the physical symptoms alone a diagnosis is not warranted. But with the appearance of any evidence of the characteristic mental derangement the value of the physical symptoms cannot be overestimated—particularly the facial tremor, stammering, tremulous speech and abnormalities in pupillary reaction.

Tea and Nervous Disorders. Dr. Charles E. Lockwood sums up the effects of overstimulating by excessive tea drinking as follows (*New York Medical Journal*, July 9th): Insomnia and restlessness, partially through stimulating action on the brain cells and partly through stimulation of the pulse and respiration, as a subsidence of respiration is necessary to sleep. Headache, vertigo, ringing in ears, flashes of light, mental dullness and confusion, apprehension of evil, with exhaustion of mind and disinclination to mental exertion. Increased and irregular action of the heart, increased respiration, muscular tremor, "nervousness," disinclination to physical exertion, hyperesthesia, paresthesia, heat and flushings of the body.

American Medical Association. At the recent meeting of this association the following was unanimously adopted:

WHEREAS, the American Medical Association did, at Detroit in 1892, unanimously resolve to demand of all the medical colleges in the United States the adoption

and observance of a standard of requirements of all candidates for the degree of doctor of medicine which should in no manner fall below the minimum standard of the Association of American Medical Colleges; and

WHEREAS, this demand was sent officially by the Permanent Secretary to the deans of every medical college in the United States and to every medical journal in the United States, now therefore, the American Medical Association gives notice that hereafter no professor or other teacher in, nor any graduate of any medical college in the United States, which shall after January 1, 1899, confer the degree of doctor of medicine or receive such degree on any conditions below the published standard of the Association of American Medical Colleges, be allowed to register as either delegate or permanent member of this association.

Resolved, that the Permanent Secretary shall within thirty days after this meeting send a certified copy of these resolutions to the dean of each medical college in the United States and to each Medical journal in the United States. Respectfully yours,

WM. B. ATKINSON, Permanent Secretary.

**Diagnosis of Appendicitis
in Children.**

The symptoms as described by Dr. Irving S. Haynes (*American Journal of Surgery and Gynecology*, June) do not differ essentially from those arising in adults. The cardinal signs are the unilateral abdominal tenderness most marked over the appendix, the presence of a tumor, and the reflex muscular rigidity of the right abdominal muscles. Before perforation, the temperature may range from 99 to 101 degrees, and the pulse from 100 to 110. As soon as perforation has taken place, though the fever may rise only to 102 or 103 degrees, the pulse jumps up to 140 or 160 and is of the thin, hard, wiry character pathognomonic of peritonitis. Meteorism, thoracic respiration and the drawn and shrunk Hippocratic facies are soon in

evidence. The writer warns against making too great pressure in palpation for fear of rupturing the already thinned and distended appendix.

Treatment of Ringworm of the Scalp.

The method employed by Unna is briefly described by Dr. Joseph Grindon in the July *St. Louis Medical Gazette*: The hair is closely cut over the whole scalp, around which a protective zone of zinc paste is applied. Then an ointment containing 5 to 10 per cent. of chrysarobin, 2 per cent. of salicylic acid and 5 per cent. of ichthyol is likewise spread over the entire scalp. This is covered with a piece of rubber tissue sealed down to the zinc paste at the margin, and over this goes a close-fitting flannel cap. Every 24 hours the cap is removed, the rubber tissue loosened at one side and turned back, the scalp dried and fresh ointment applied. On the fourth day the chrysarobin ointment is mopped off with pledgets of cotton, and a 5 per cent. ichthyol ointment applied daily for three days. At the end of the week all dressings are removed and the scalp cleaned. The entire procedure is then repeated, until the cure is complete, often within four weeks. This method seems to be a very troublesome one, but the disease itself tends to be exceedingly chronic and relapsive, and by the ordinary methods, as the writer remarks, he who conducts a case to a complete cure within eight months should be content.

Blood Examination in the Diagnosis of Appendicitis.

As the formation or not of pus is the principal indication for or against immediate operation in abdominal diseases, the presence or absence of hyperleucocytosis become of great practical value in determining our course of treatment. This fact is well brought out in a report by Dr. George Douglas Head (*Northwestern Lancet*, July 1st) of sixteen cases diagnosed clinically as appendicitis or pelvic abscess in certain instances when the leucocyte

count did not coincide with such a conclusion. Operation proved the microscopic results more reliable than the physical signs. The only important exception to the rule of leucocytosis in pyemic infections of the abdomen is in very severe, usually fatal, septic conditions, such as general suppurative peritonitis, where reaction is at a minimum.

Treatment of Diseases of Pigmentation. Shoemaker is quoted as discussing the treatment of pigmentary affections (*Philadelphia Medical Journal*, July 16th) much as follows: For lentigo, the best method is electricity, either electrolysis or frequent galvanism. Chloasma should receive the same, besides correcting any internal cause, and the same holds true of morphea. Jaundice requires internal treatment; syphilis, mercurials; malaria, quinine, arsenic and iron or change of climate. In scleroderma, hygienic care, tonics, alteratives, free diaphoresis, hot baths, massage and electricity are useful. Exophthalmic goiter requires hygienic regulations, together with vascular and nervous sedatives. Addison's disease has improved under the use of suprarenal extract. Vitiligo may be treated locally with irritants and blisters, with the object of encouraging pigment deposition. Nevus pigmentosus, xanthoma and xeroderma pigmentosum are best removed by excision, ligature caustics or the galvano cautery or electrolysis. Argyria and leprosy are hardly amenable to any treatment at present employed.

The Teeth in Trifacial Neuralgia. Very frequently neuralgia of the face is of dental origin, even when unaccompanied by toothache or surface decay of teeth. The diagnosis of these cases is, nevertheless, easy by means of transmitted electric light, says Dr. Walter M. Thorne (*Occidental Medical Times*, May). Viewed in this way the healthy teeth appear of a bright pinkish color, the affected one of a dark ashy gray hue. The writer reports two cases of

internal dental abscess and one of fracture, all causing severe neuralgia and readily discovered by this very simple method.

Toxic Properties of Indol. From a rather extensive examination and clinical study (*New York Medical Journal*, July 25th), Dr. C. A. Herter concludes that prolonged and excessive indol absorption is capable of causing headache (frontal particularly), abnormal cephalic sensations, and indisposition for physical and mental exertion, which in time may form the basis of a neurasthenic state. Individual susceptibility, however, varies greatly, and exceptionally some robust persons may habitually excrete a large amount of indoxyl-potassium sulphate (indicanuria) without definite evidence of derangement of health. Even in great excess it does not seem capable of exerting highly toxic effects.

Mississippi Valley Medical Association. The twenty-fourth annual meeting of the Mississippi Valley Medical Association will be held at Nashville, Tenn., October 11-14, under the presidency of Dr. John Young Brown, of St. Louis, Mo. This association is second only in size to the American Medical Association and has done most excellent scientific work in the past. The annual addresss will be made by Dr. Jas. T. Whittaker, of Cincinnati, on Medicine, and by Dr. Geo. Ben Johnson, of Richmond, Va., on Surgery. The mere mention of the names of these gentlemen establishes the fact that the association will hear two scholarly and scientific addresses. Nashville is a most excellent convention city and is well equipped with hotels, and with the record of the meeting in Louisville in 1897 as an example, the local profession under the leadership of Dr. Duncan Eve as chairman of the Committee of Arrangements has prepared to have a better meeting. Already titles of papers are being received. These

should be sent to the secretary, Dr. Henry E. Tuley, 111 West Kentucky street, Louisville, Ky., as early as possible to insure a good place on the program. Reduced rates on all railroads will be granted on the certificate plan.

Gonorrhea in the Female. Mercuric chloride probably remains our most efficient antiseptic in these cases. It should be used in a strength not to exceed 1—20,000 for urethral and vesical injections, but the vagina and uterus will readily bear solutions ten times as strong. Dr. Chauncey D. Palmer (*Ohio Medical Journal*, July) says that it has been his practice to thoroughly scrub the vagina and vulva with German green soap, irrigate freely with hot water, and then forcibly mop the whole vaginal and vulvar tract with 1:2,000 sublimate solution. If the disease is intrauterine, the patient is anesthetized and the womb is dilated and curetted and washed out with a lotion of the same strength. After mopping the uterine cavity dry with sublimate gauze, the writer is accustomed to inject with an appropriate syringe, from 20 to 30 drops of pure carbolic acid.

A Fatal Case of Chronic Strychnine Poisoning. The dangers lurking in the long continued use of this drug are exemplified by the report of a case by Dr. A. H. Falconer in the *American Practitioner and News* for July. The patient, a married woman aged 35, had been taking 1—30 grain strychnine tablets four times a day steadily for eight months. The toxic symptoms included great weakness, vertigo, chilly sensations, slight fever, weak but regular pulse ranging from 112 upward, occasionally stiffness of back of neck, clonic contractions of the fingers of both hands, and restlessness or delirium. In spite of energetic supporting and eliminating treatment the asthenia increased and the convulsions became more frequent and general with profuse perspiration, the patient dying unconscious

nine days after coming under medical observation. The occurrence of a moderate rise in temperature and in pulse frequency is so common after the continued administration of strychnine as to deserve special mention, particularly as the stoppage of this drug is often all that is needed to restore an apparently weak subject to a condition of perfect health.

The Exercise Treatment of Locomotor Ataxia. Frenkel's system of exercises, as outlined in the newer textbooks on nervous diseases, has proved of great service in the improvement of the ataxic symptoms of tabes. Dr. Philip Zenner (*Cincinnati Lancet-Clinic*, July 16) formulates the following rules in reference to this method:

1. All cases should be benefitted by the exercise treatment, many to the degree of apparent recovery, unless there be special contraindications to the treatment. Failures under these circumstances usually mean faulty methods, or that the treatment has not been persevered in sufficiently long.

2. Contra indications are: Loss of vision, mental impairment, bone and joint disease, spasticity and muscular atrophy, the presence of strong irritating symptoms, rapid progress of the disease, a state of great exhaustibility, and serious organic disease.

3. In cases of anemia, poor nutrition and lax joints, these general and local conditions should be remedied before the treatment is instituted.

4. The conditions most favorable for the treatment are a stationary or almost stationary state of the disease, good general health, intelligence, hopefulness and perseverance.

5. Light cases are more amenable to a (practical) cure, but bad, even bed-ridden, cases often give brilliant results.

6. The necessary duration of treatment varies from a month or more for the lightest, to six months

or a year for bad cases, but the exercise must be kept up in order to insure the continuance of the improvement.

7. Success of treatment depends upon thorough knowledge of the method. This is especially true of bad cases.

8. Exercises should be chosen most suitable to remedy the existing ataxia, and every effort should be made to do them with greatest precision.

9. The sense of fatigue is often blunted in ataxics, while over-fatigue injures them. The patient should therefore be guarded against too prolonged exercises, or other unnecessary efforts.

10. To obtain most benefit from the treatment the constant supervision of the physician, at least in its early periods, is absolutely necessary.

Guaiacol Carbonate in Typhoid Fever. Dr. J. C. Cockburn, president of the Hennepin (Minn.) Medical County Society, is another who believes that typhoid can be aborted. He signed the last death certificate in September, 1894, with uncomplicated typhoid as the cause, since which time he has treated 76 cases of the fever, nearly all of them being confirmed by the Widal test (*Northwestern Lancet*, July 15). The treatment employed has varied with each patient, being in general antiseptic, eliminative and supporting. He has found guaiacol carbonate the one thing needed as an antiseptic, three grains three times a day being ordinarily a sufficient dose. As an eliminant calomel and soda in small repeated doses is perhaps the best for children, while the combination of calomel, soda and podophyllin in sufficient dosage to produce three or four formed stools in 24 hours is to be preferred for adults. Under this treatment the writer has seldom, if ever, found alcoholic stimulants necessary. The baths he considers a very important supporting measure; he thinks he has seen the best results from a warm

or hot sponge bath, leaving the patient exposed to the air without wiping dry. The ordinary fever diet, such as milk broth, beef tea, eggs, and milk, oysters or oyster broth, custard, blanc mange and farinaceous breakfast foods are well borne with this course of treatment, under which the fever usually terminates within ten to fourteen days. The plan of treatment followed by Dr. Cockburn is very similar to that pursued by many western physicians, and certainly his record speaks for itself.

Management of Placenta Previa. The modern treatment of this grave anomaly is thus summarized by Dr. W. H. Winning, in the *Buffalo Medical Journal*: The tampon is indicated in hemorrhage toward the end of pregnancy, in the beginning of labor when os is closed, in moderate dilation of cervix (followed by cervical tampon); it is contraindicated when dilation is complete or nearly so, and when it fails to arrest hemorrhage even if dilation is not far advanced. Rupture of the membranes is called for when os is well dilated, when hemorrhage is better controlled by this method than by any other means, and when in the absence of labor pains it will be followed by immediate pressure of the presenting part; it is contraindicated when the os is undilated and pains good, or in faulty presentation of the foetus, unless it can be followed by immediate version. Version is indicated when the os will admit two fingers and combined version can be readily made, when the os is well dilated or dilatable and hemorrhage profuse, and with accouchment force in desperate cases; it is contraindicated when with a moderately dilated os combined version cannot be skillfully made, or when with a well-dilated os, after rupture of the membranes the head immediately engages in the cervix.

EDITORIAL ITEMS.

Ametropia of Infancy.—Ninety per cent. of infants are said to be normally far-sighted.

Bruises.—Olive oil rubbed in and applied on a cloth over the affected part is said to be of service.

Another Consolidation.—The University of Buffalo and Niagara University are the latest to join forces.

President Wm. Osler.—Dr. Osler has succeeded Dr. Welch as dean of the Johns Hopkins Medical School.

Phonographing Heart Sounds.—Edison is said to be working on a machine arranged expressly with this end in view.

Tubercular Otitis Media.—Multiple painless perforation of the drum membrane is said to be a suspicious symptom.

Raw Cow's Milk for Infant Feeding.—For more than two years raw milk has been used in place of sterilized in the New York Infant Asylum.

Tinnitus Aurium.—Robin highly extols the fluid extract of cimilifuga in the daily dose of thirty minims for this troublesome symptom.

Dental Colleges.—In the United States there are now fifty-three of these colleges, which have graduated thus far about 1,600 students.

Urticaria of the Uvula.—Guy Hinsdale reports in the *Philadelphia Polyclinic* of July 30th a case of this rare complication nearly causing asphyxia.

Simple and Ancient Remedy for Epistaxis.—This is the injection of a small syringeful of lemon juice into the nasal cavities, after clearing away the clots.

Sudden Death in Children.—Sudden fatal asphyxia in children may be due to an enlarged thymus, or to acute rachitic lordosis compressing the trachea.

The Wier Mitchell Diet for Obesity.—This consists of three weeks exclusively of eggs and milk, one egg in a half pint of milk every three hours in daytime.

After the Spree.—Chloride of ammonium in full doses will overcome the immediate effects of drunkenness, according to the *Cincinnati Lancet Clinic*.

Chronic Urticaria.—The tincture of strophanthus in five-drop doses is asserted to be almost a specific for the obstinate urticarias of anemic young women.

The Poor Drug Clerk.—The bill lately passed by the New York State Legislature, providing shorter hours to drug clerks, has been vetoed by Mayor Van Wyck.

Eosinophile Cells in Sputum.—The presence of these cells is of favorable prognostic import in tuberculosis, showing a certain capacity of reaction on the part of the system.

The Red Cross.—The symbol of this organization is the reverse of the flag of Switzerland (a white cross on a red ground), where the first society was formed twenty-four years ago.

Banquet.—The medical profession of Denver tendered to Dr. J. W. Graham and Dr. W. A. Jayne a banquet, July 26th. About fifty physicians were present and there was a royal good time.

Alcohol and Ear Troubles.—Fayette C. Ewing (*Medical Fortnightly*) states that alcohol long continued may cause congestion of the internal ear, and, by extension from the throat, set up middle ear disease.

Dr. N. S. Davis Resigns.—After thirty-three years of continuous executive service, this veteran in medicine has resigned the deanship of the Northwestern University Medical School (formerly Chicago Medical College.)

Liquefaction of Gases.—The last of the so-called "permanent" gases, hydrogen and helium, have recently been liquefied by Prof. Dewar at the Royal Institution. The temperature required was near that of space, or the absolute zero.

Urethral Tuberculosis.—A diagnostic sign is said to be eversion of the meatus uris arius, which is slightly roughened, of a bluish tinge and somewhat infiltrated, as shown by compression of the part between the thumb and finger.

The Favorite Patent Purgative.—Senna is the principal ingredient of most of the secret bowel-movers (excepting pills) such as Syrup of Figs and Garfield Tea. It has the great advantage (from the dealer's standpoint) that the more you take of the drug the more you will need to take.

Lateral Curvature.—Dr. Wirt A. Duvall (*Maryland Medical Journal*, July 16th) makes a strong argument against the corset as the chief cause of this deformity, and recommends to "Put off the splints and let the backbone get its natural stiffness through activity and health-giving motion.

He Was Just Like Other Doctors.—The widow of Sir Morell Mackenzie, the eminent London throat specialist, has opened a modest shop in that city, in order presumably to make both ends meet.

Suggestive Treatment of Enuresis.—Dr. Britton, a Canadian physician, reports a complete cure of a marked case of urinary incontinence by daily suggestions to the child during quiet sleep.

The Pay of Army Surgeons.—The *Kansas City Medical Record* states that a surgeon ranking as lieutenant gets \$1,600 a year; one ranking as captain, \$2,000; and a surgeon major, the highest rank, \$2,500. They must provide their own rations, but are granted, free of charge, food and stabling for their horses.

Yellow Fever at Santiago.—For the past few weeks the American army of occupation in Cuba has been repelling the attack of "Yellow Jack," the total sick list from this cause averaging about 3,000 daily. Fortunately a large proportion of the troops are "immune" to the fever and the death rate thus far has been exceptionally low.

A Point in the Diagnosis of Appendicitis.—A history of previous colitis, as manifested by copious mucous stools, may be of value in the differentiation from pelvic disease. Indeed, it seems probable that in the majority of cases inflammation of the appendix is preceded by other inflammatory lesions of the contiguous intestinal tract.

Medical Editors' Meeting.—At the last meeting of the Association of American Medical Editors the following resolution was unanimously adopted: *Resolved*, That matter which, in the judgement of the editor, is clearly in the nature of an advertisement, or reading notice, shall be excluded from the regularly-paged parts of the journal, and placed exclusively in the advertising pages.

The Pain of Intestinal Obstruction.—A. H. Cordier, in the *July Medical Herald*, says that a continuous and severe pain means a complete obstruction. A continuous mild pain with exacerbations implies a partial obstruction, such as chronic stricture or incomplete closing of acute intussusception. The location of the pain does not designate the site of the obstruction, unless of inflammatory origin.

Pernicious Anemia and Latent Gastric Carcinoma.—To distinguish between these two cachexias, Frederic P. Henry, (quoted in *Philadelphia Medical Journal*,) considers the blood count a certain test. He has never seen a case of carcinoma of the stomach in which the red cells fell below 1,500,000; on the other hand, he has never observed a fatal case of pernicious anemia in which the blood count was not under a million.

THERAPEUTIC NOTES.

The following prescriptions and therapeutic hints are published in the *New York Medical Journal*, August 6th. So many of the prescriptions seem to us to be so very practical that we reproduce them in the MEDICAL TIMES:

A Mixture for the Foetid Diarrhea of the Initial Stage of Scarlatina.—Filatov (*Revue Mensuelle des Maladies de l'Enfance*, July) recommends the following:

℞ Sulphite of magnesium, } of each ... 60 grains;
 Liquid sulphuric acid, }
 Distilled water 6 ounces;
 Syrup 450 grains.

M.—A teaspoonful or tablespoonful, according to the child's age, from hour to hour. This draught is markedly anodyne, and is well taken by little children.

Treatment of Ivy Poisoning.—The *Canada Lancet* for May recommends the following: Keep the affected parts well wetted with freshly made lime water. Take a teaspoonful four times daily of

℞ Fluid extract of couch-grass 4 drachms;
 Sweet spirit of nitre 1 ounce;
 Syrup of lemon 1 “

A Painless Blister.—The *Journal des Praticiens* for June 25th gives the following:

℞ Menthol, } of each 15 grains;
 Chloral hydrate, }
 Cacao butter 30 “
 Spermaceti 30 “

Mix to a paste, which may be spread on linen or diachylon plaster. It acts like the cantharides plaster.

Iodine in Obstinate Vomiting.—According to the *Medical News* for July 16th, Steffen recommends the following prescription:

℞ Tincture of iodine 10 drops;
 Distilled water 4 ounces.

M.—One tablespoonful to be taken in half a glassful of sweetened water between meals.

The Relief of Fever in the Tuberculous.—De Renzi (*Clinica Moderna*, July 29th) advises the use of thymol, which has a certain and rapid antipyretic effect without deranging the digestion, but rather improving the condition of the stomach. It is given in doses of four

cachets daily, each containing three grains and three-quarters. The dose is augmented until apyrexia is attained. Between ninety and a hundred and five grains suffice to subdue the fever.

Aromatic Cod-Liver Oil.—Duquesnel (*Gazette Hebdomadaire de Medecine et de Chirurgie*, July 14th) gives the following formula:

℞ Yellow cod-liver oil.....16 ounces;
Essence of eucalyptus.....75 minims.

M.—The taste of the eucalyptus entirely replaces the disagreeable taste and odor of the oil.

For Infantile Convulsions.—The *Riforma Medica* for June 7th gives the following:

℞ Musk5¼ grains;
Gum arabic..... 30 “
Fennel water,
Syrup of orange bark, } of each.....375 “

A teaspoonful every hour or two.

Treatment of Hæmorrhoids.—The *Gazzetta Degli Ospedali e Delle Cliniche*, July 12th, recommends the following when the hæmorrhoids are not prolapsed:

℞ Vaseline 225 grains;
Cocaine hydrochloride..... 3 “
Antipyrine22½ “
Salol 15 “
Wax sufficient for solid consistence.

Two or three times a day a piece the size of a small nut to be introduced into the anus. When the hemorrhoids tend to inflame, use in similar manner the following:

℞ Vaseline 3 grains;
Cocaine hydrochloride2¼ “
Tannin..... 15 “
Extract of rhatany7½ “
Extract of belladonna1½ “
Wax as required.

Treatment of Green Infectious Diarrhœa in Infants.—Herzen (*Guide et Formulaire de Therapeutique; Progres Medical*, July 16th) gives the following prescription:

℞ Lactic acid30 grains;
Syrup of quince..... 1 ounce;
Distilled water 3 ounces.

M.—A teaspoonful every half hour.

The Treatment of Asthma with Arsenic and Stramonium.—Murray (*Clinica Moderna*, June 29th) recommends the administration of seven drops of the tincture of stramonium three times a day till the end of the access, and five drops of Fowler's solution at each meal.

Subsequently a single daily dose of seven drops of the stramonium. At the same time are given carbonate of ammonium and bicarbonate of sodium as expectorants and some drops of chloroform as a calmative.

The Treatment of Fermentative Diarrhœa in Children.—Picchini (cited in the *Journal de medecine de Paris* for May 8th) recommends the following formula:

℞ Iodoform 9 grains;
 Ether,
 Finely powdered charcoal, } of each 1,500 "
 Glycerine.....2,700 "

Dissolve the iodoform in the ether, and mix the charcoal intimately with the solution; let the ether evaporate, and add the glycerine. The whole is to be taken in the course of twenty-four hours, in tablespoonful doses, each suspended in a glass of water.

Ointments for Rheumatic Joints.—The *Journal des Praticiens* for July 16th gives on the authority of Bourget the following formula:

℞ Salicylic acid,
 Essence of turpentine, } of each 225 grains;
 Lanolin, } of each.....1,500 "
 Lard, }

M.—The parts are covered with this ointment and a dressing of absorbent cotton applied and covered with an impervious covering. The turpentine softens the skin and aids the absorption of the salicylic acid, as does also the impermeable covering. The turpentine is said by Sterling to induce eczema, and he recommends its omission.

Arendt recommends ichthyol applications by means of a brush and gives the three following formulæ:

℞—1 Ichthyol, } of each.....150 grains;
 Distilled water, }
 Lanolin450 " M.

℞—2 Ichthyol 225 grains;
 Extract of belladonna22½ "
 Lanolin 450 " M.

℞—3 Ichthyol, } of each.....150 grains;
 Dilute spirits of wine, }
 Distilled water.....600 " M.

Eau de Javel will remove the stains of ichthyol from the linen.

BOOKS.

Conservative Gynecology and Electro-Therapeutics.—A Practical Treatise on the Diseases of Women and their Treatment by Electricity. Third Edition, Revised, Rewritten and Greatly Enlarged. By G. Betton Massey, M.D., Physician to the Gynecic Department of Howard Hospital, Philadelphia; Late Electro-Therapeutist to the Infirmary for Nervous Diseases, Philadelphia; Fellow and ex-President of the American Electro-Therapeutic Association, of the Societe Francaise d'Electrotherapie, of the American Medical Association, etc. Illustrated with Twelve full-page Original Chromo-Lithographic Plates in Twelve Colors, Numerous full-page Original Half-Tone Plates of Photographs taken from Nature, and many other Engravings in the Text. Royal Octavo; 400 pages. Extra Cloth, Beveled Edges, \$3.50 net. The F. A. Davis Co., Publishers, 1914-16 Cherry St., Philadelphia; 117 W. Forty-Second St., New York City; 9 Lakeside Building, 218-220 S. Clark St., Chicago, Ill.

That ovariectomy and hysterectomy are not the sum of gynecologic therapy is shown by the demand within a few years for a third edition of this excellent work. As it stands now, the book is practically a new one, built upon the skeleta of preceding editions. The chapters on the principles and medical application of electricity are complete and easily comprehensible. As proved by his detailed tables and illustrative cases, the author's results in uterine fibroids, endometritis and malignant disease are little less than remarkable, which all goes to show that the manner and method of using electricity is the all important factor. A unique feature is the appearance of the colored plates of the cervix and uterine discharges in typical cases of disease, as well as the half-tone photogravures illustrating the motor points of nerves and muscles, as verified in the living model. Aside from its more immediate scope, the work comprises a practical outline of gynecologic etiology, pathology and diagnosis. We commend the book to every reader who has to do with diseases peculiar to women.

A Compend of Diseases of the Skin.—By Jay F. Schamberg, A.B., M.D.; Associate in Skin Diseases, Philadelphia Polyclinic; Dermatologist to the Union Mission Hospital; Quiz-Master in Dermatology, Association of Quiz-Masters, University of Pennsylvania. With Ninety-Nine Illustrations. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street, 1898.

This is a well arranged and helpful little book, which will doubtless soon find many friends among medical students. The list of diseases considered is very nearly complete, including the syphilo-

dermata. The classification followed is that of Duhring, published in a late number of the *Journal of Cutaneous and Genito-Urinary Diseases*. Special attention is given to differential diagnosis, which is facilitated by a large number of parallel tables. The directions for treatment are simple and direct, embracing a good many favorite prescriptions.

Atlas of Syphilis and the Venereal Diseases.—Including a Brief Treatise on the Pathology and Treatment. By Prof. Dr. Franz Mracek of Vienna. Authorized Translation from the German. Edited by L. Bolton Bangs, M.D.; Consulting Surgeon to St. Luke's Hospital and the City Hospital, New York; Late Professor of Genito-Urinary Surgery and Venereal Diseases, New York Post-Graduate Medical School and Hospital. With Seventy-One Colored Plates. Philadelphia: W. B. Saunders, 925 Walnut Street, 1898. Price, \$3.50.

Probably no other volume of this admirable series will find such a ready demand as this one. Beginning with the chancre, in its various forms and sites, the water-colors reproduce to the life typical examples of all the clinical lesions of syphilis, gonorrhea and chancroid. Each plate is accompanied by a context, briefly describing the case as to local and general symptoms, and the treatment pursued to effect a cure. The appendix furnishes a practical summary of the salient features of the various stages of syphilis and the venereal diseases, together with many useful recipes and helpful suggestions as to treatment. The book cannot fail to be of great service to all who possess it.

International Clinics.—A Quarterly of Clinical Lectures on Medicine, Neurology, Surgery, Gynecology, Obstetrics, Ophthalmology, Laryngology, Pharyngology, Rhinology, Otology and Dermatology, and Specially Prepared Articles on Treatment and Drugs. By Professors and Lecturers in the Leading Medical Colleges of the United States, Germany, Austria, France, Great Britain and Canada. Edited by Judson Daland, M.D., Philadelphia; J. Mitchell Bruce, M.D. F.R.C.P., Aberdeen, Scotland. Volume II., Eighth Series, 1898. Philadelphia: J. B. Lippincott Company.

The first of the thirty-six contributions to the present volume, entitled "Suggestions as to the Use of Digitalis," is by our own Dr. J. N. Hall, who writes as one that knows the heart of man. Another noteworthy and richly illustrated paper is that by James K. Young, on the treatment of functional and lateral curvature by light gymnastic exercises. Ewald discourses entertainingly before his clinic on the various forms of gastralgia, as exemplified in the persons of a number of patients. John A. Larrabee has a useful every-day article on the bronchopneumonia following measles.

James Cautlie gives a very full account of the pathology, symptomatology and treatment of sprue. Senn handles the subject of "Etiology and Classification of Cystitis" with his customary judicial thoroughness. Keen reports a case of appendicitis in which the appendix became permanently soldered to the bladder, like a third ureter, producing a urinary fecal fistula. Our bald-headed friends will no doubt be duly grateful to Jay F. Schamberg for the helpful hints he gives them in his lecture on their ailment.

Manual of the Diseases of Children.—By John Madison Taylor, A.M., M.D., Professor of Diseases of Children, Philadelphia Polyclinic, and William H. Wells, M.D., Adjunct Professor of Obstetrics and Diseases of Infancy in the Philadelphia Polyclinic. Illustrated. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street, 1898. 743 pages. Price, \$4.00.

This work fulfills its purpose admirably as a practical working manual—"a brief but competent guide for the student and practitioner." It is particularly strong in matters of hygiene and the feeding of infants and children. The pathological portion is abbreviated so as to make more room for treatment, an arrangement which, we think, will be very satisfactory to the physician who is generally looking for advice as to what is best to be done. The text covers all the list of diseases except those of the eye and ear. Deserving of special mention are the excellent chapters on physiology, physical development, diseases at or near birth, and diseases and accidents requiring surgical procedures. The experience of the authors as teachers has enabled them to select and arrange well, in addition to the power of concise and accurate expression. No student or medical man who buys the book will ever have occasion to regret doing so.



SELECTIONS.

The hypnotic effect of Bromidia does not by any means represent the sole benefit to be derived from this preparation, but it meets, in a very perfect manner, many other indications involving hyperaesthesia of nerve tips and over-excitability of spinal cord. In doses of one-half teaspoonful, given every four hours for two days, will so benumb the sensory nerve tips of the buccal cavity that dentists can take impressions of the mouth, fit in rubber dams, etc., that would otherwise be impossible on account of the gaging peculiar to some patients. In the hands of the medical practitioner, given in half-teaspoonful doses every four hours, will make life endurable for hay-fever patients during the months of August and September. A teaspoonful will completely quiet the paroxysmal pain following childbirth or miscarriage without in any way interfering with uterine contractions.

THE BEST AND THE CHEAPEST.—In prescribing either medicine or nutriment, a physician must often consider the question of what is the most economical as well as what is the best for his patient. And it is only occasionally that he is made happy by the knowledge that the cheapest is the best. He always knows that "the best is the cheapest," but this helps him very little if economy must be thought of. John Carle & Sons point with pride to the fact that their prepared food, Imperial Granum, is the most economical as well as the best food on the market, and in proof of this, they ask physicians to carefully note the weight of their handsome "Small" and "Large" size air-tight tins, and also to kindly notice the length of time either one will last, bearing in mind that their sterilized tins form the lightest, as well as the safest retainer that can be used.

THE PROMPT SOLUTION OF TABLETS.—We are glad to know that the Antikamnia people take the precaution to state that when a prompt effect is desired the Antikamnia Tablets should be crushed. It so frequently happens that certain unfavorable influences in the stomach may prevent the prompt solution of tablets that this suggestion is well worth heeding. Antikamnia itself is tasteless, and the crushed tablet can be placed on the tongue and washed down with a swallow of water. Proprietors of other tablets would have had better success if they had given more thought to this question of prompt solubility. Antikamnia and its combination in tablet

form are great favorites of ours, not because of their convenience alone, but also because of their therapeutic effects.—*The Journal of Practical Medicine.*

J. L. Ridley, M. D. Huntsville, Ala., says: "I have used S. H. Kennedy's Extract of *pinus Canadensis*, both White and Dark. I can frequently cure gonorrhea without any other remedy. I use either as an injection, and prescribe the Dark internally, where there is irritability about the mouth of the bladder. I have learned to regard it as a specific. In chronic cystitis I have derived great benefit from it, and in leucorrhea it relieves when many other remedies fail. It is a valuable remedy, and I have had marked success with it.

I consider Dioviurnia almost a specific in uterine troubles. In threatened abortion it gives almost instant relief; has never failed me in a single case of uterine colic. In all cases of female neurosis I combine Neurosine, 4 ounces; Dioviurnia, 2 ounces, with the very best results. I shall continue their use in my practice.—J. P. Carrington, M.D., Waller, Texas.

Dr. L. Lewis, Lewis Sanitarium, Auburn, N. Y. reports: "I had a Mrs. R. upon Hagee's Cordial, and she improved every day. Her weight when she began was 101 pounds and is now 145 pounds., after eight months' use of the Cordial. She had night sweats, hectic cough, diarrhoea and all the regular symptoms which are connected with phthisis."

The Chicago Eye, Ear, Nose and Throat College, Suite 303, 67 Wabash Ave., Chicago, since moving into its new and commodious quarters, affords its pupils every convenience and accommodation, and is treating hundreds of interesting cases daily.

The preparations of Pepsin made by Robinson-Pettet Co. are endorsed by many prominent physicians. We recommend a careful perusal of the advertisement of this well-known manufacturing house. (See page 29.)

Recent novels of American life form the subject of an entertaining and on the whole discriminating paper in the *Edinburgh Review*, which American readers will find in *The Living Age* for July 16.

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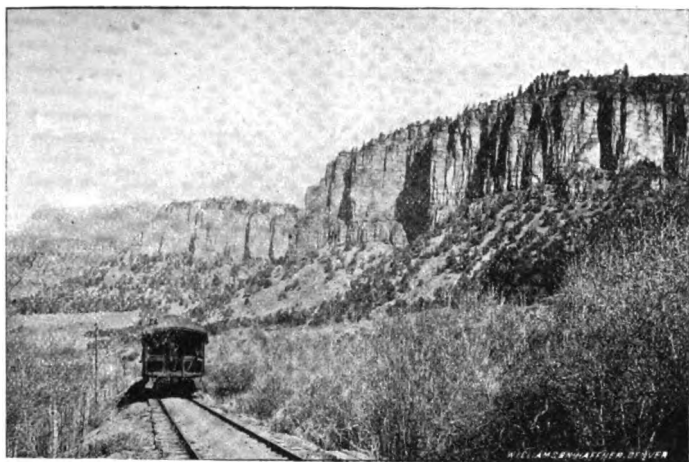
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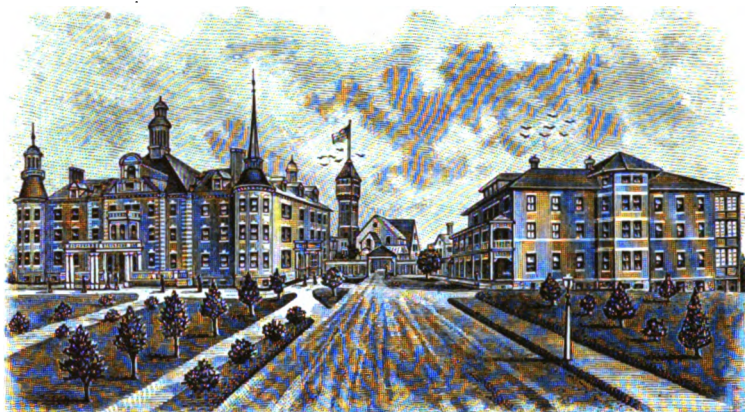
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ORIGINAL COMMUNICATIONS.

HAEMATOLOGY IN DIAGNOSIS.

By G. H. STOVER, M.D.,

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Denver, Colorado.

The science of haematology has developed from a crude beginning into a very extensive subject within comparatively a few years. When we studied physiology, we were taught that the blood was a serous alkaline fluid, containing red and white corpuscles; a great deal of attention was paid to the manner in which clotting occurred, and to the chemical changes taking place during the process; the red corpuscles were said to contain coloring matter which was diminished in certain diseases; they also presented variations in number and shape in some conditions; in leucocythaemia the white corpuscles were greatly increased in number.

What a change is found when we consider the science of the blood at the present day! And the advance has been highly due to the introduction of staining methods, in the same way that the histology of the "fixed tissues" has been made to yield such a rich store of information.

We find in the red cells changes in size and shape, in color reactions, the presence of nucleation, endoglobular degenerative changes, and, while in some diseases they are decreased in number, in other conditions their number per cubic millimeter is considerably increased. Instead of one variety of red cells they are now classified as erythrocytes or normal red blood cells (the same term is applied to red cells in general in most writings), megalocytes, normoblasts, megaloblasts, microblasts, poikilocytes, shadow corpuscles, etc.

The white cells or leucocytes show increase or decrease in number, variation in staining reaction of their different parts,

variations in shape of nuclei and presence or absence of granules of different kinds. Owing to the fact that nearly all of them have amoeboid motion, but little information is derived from their form, a factor which is of so much importance in the case of the erythrocytes. The leucocytes are divided into small lymphocytes, large lymphocytes, transitional lymphocytes, eosinophiles, polymorpho-nuclears, and myelocytes, beside other forms not typical, and difficult of classification, but which have been given specific names by some observers.

Incidentally I should like to say that I almost believe the leucocyte to be a living, independent individual organism. If you will put a drop of fresh blood on a warm slide, apply over it a warm cover glass and watch one of the leucocytes under a high power for an hour or so, then do the same with the ordinary water amoeba, and if you care to go farther, study also the amoeba coli or parasite of amoebic dysentery, I think you will reach the same conclusion.

But to go back to our subject, it is in only a few instances that the examination of the blood alone, unaided by other means of investigation, will give the complete diagnosis, and sometimes indicate thereby the prognosis and treatment, but there are some cases in which it will do this, as in pernicious anaemia, splenic and lymphatic leukaemia, and possibly in trichinosis. The diagnosis of Hodgkin's disease cannot be made except the blood be examined.

As a general rule, however, the blood examination is only a part of the examination of the patient and its findings must be considered in conjunction with the results of the other inquiries; although but a part of the general examination, the results of the blood study are often of high importance, usually in a positive manner, but sometimes negatively. The positive evidence given by the blood may be illustrated by a case I examined for Drs. Freeman and Shollenberger of Denver. A man had for some years tumors scattered throughout the lymphatic gland areas of the body, and they were slowly growing in size. I was consulted in order to differentiate between syphilis, tuberculosis, leukaemia and pseudo-leukaemia or Hodgkin's disease. The examination I made of the blood showed typical lymphatic leukaemia. On the other hand, had this man's blood been normal, that is, if the finding had been negative, the diagnosis of Hodgkin's disease would have been sure. The details of this examination will be published elsewhere in connection with some other cases of leukaemia.

Among the instances in which the blood examination is of use when considered along with other clinical evidence, may be

mentioned the following. In a patient with abdominal pain and tenderness and other symptoms which might cause one to hesitate between the diagnosis of appendicitis and fecal impaction, the presence of a marked leucocytosis would very strongly and almost positively argue in favor of the former. If the patient were a female the indication would not be so certain, for she might have some other pelvic suppuration. In cases of pelvic inflammation in females, the presence of leucocytosis would indicate that pus had formed. In cases of pelvic pain, where the pain is as great from neuralgia as from inflammation, the presence or absence of leucocytosis would give practically positive information as to the gravity of the process.

In the different anaemias of females the blood appearances are radically different, thus being of great prognostic value, as for instance in differentiation between chlorosis and pernicious anaemia.

In many pulmonary or pleural diseases the blood affords valuable information. In the great majority of serous pleuritis there is no leucocytosis, while in empyema the leucocyte count is high. In tuberculosis a high leucocyte count would indicate the existence of a cavity.

In pneumonia, if there is no leucocytosis, the prognosis is as a rule unqualifiedly bad. In some of those cases in which it is impossible to say whether a patient has typhoid fever or pneumonia, if there is leucocytosis, one can safely diagnosticate the condition as pneumonia, for typhoid fever has no leucocytosis. Between ulcer and cancer of the stomach the diagnosis is frequently assisted by repeated blood examination.

I have mentioned only a very few from the long list of conditions when blood examination is of a diagnostic importance in the practice of internal medicine. In surgical practice the field is almost as great. I have barely hinted at the information gained from a differential count of leucocytes. I have not gone at all into those conditions in which various factors of the general blood appearances must be weighed against each other and against a number of other clinical signs. I have merely scratched the surface of the subject, indicating a few of the conditions we are most liable to meet in which the study of the blood is of obvious importance.

The careful study of a blood specimen is a rather tedious and delicate operation, requiring for a full examination some hours of hard work, but the importance of the finding is sufficient to warrant its frequent performance. Haematology is now recognized as an important branch of scientific medicine and its position will only grow firmer as its usefulness is better understood.

HEPATIC CIRRHOSIS.

By J. N. HALL, M.D.,

Professor of Medicine in Gross Medical College,

Denver, Colorado.

[A Clinical Lecture delivered at the Arapahoe County Hospital, Sept. 7, 1898.]

The patient whom I show you to-day is 59 years of age, male, a laborer in an iron foundry. He has no family history bearing upon his present disease. He has not had syphilis. For many years he has been a steady drinker, using especially whiskey, and indulging in an occasional "spree" as well. For two months he has been unable to work and has meanwhile "assisted" about a saloon. His health has been gradually failing for many months and he has lost at least twenty-five pounds of flesh. On July 4th he drank freely and suffered the next day from a severe diarrhoea, from which he has never been free since that time. Although much mucus has appeared in the stools they have been free from blood, during the whole course of the disease. His digestion has of late been very poor; he is much troubled by flatulence, no vomiting of note and no hematemesis; no cough nor other respiratory symptoms, if we except recent dyspnoea. There has been a gradual increase for the past two months in the size of the abdomen, parallel with the increasing shortness of breath. He does not complain of itching of the skin. Upon physical examination we find the patient markedly emaciated. Although jaundice is not apparent in the skin the conjunctivae are distinctly yellow. The temperature has gone but little above the normal, pulse of fair strength and varying from eighty to ninety-six per minute. The breathing is slightly increased in frequency, tongue moderately coated; the abdomen is enlarged, flattened in the center, with protuberant navel; there is no enlargement of the abdominal veins. Upon percussing the abdomen while the patient lies upon the back we find flatness everywhere excepting in a circular space of the size of a dinner plate in the central and upper portion. Here tympanitic resonance appears. As we turn the patient to either side we find the areas of resonance constantly appearing uppermost, as we now demonstrate by means of these colored lines. Holding one hand at the level of the resonance and tapping the opposite side of the abdomen with the other we feel distinctly the transmitted wave as it strikes the fingers. There is considerable edema of the feet and legs but none elsewhere.

The area of cardiac dullness and the apex beat are displaced upward, the latter being found in the fourth space and the upper limit of the former being correspondingly raised. The hepatic dullness begins underneath the nipple at the fifth interspace instead of at the sixth, as under normal conditions. The dullness in the left flank extends upward in a curved area in the region of the spleen as far as the seventh interspace in the mid-axillary line. The lower limits of the liver and spleen can neither be felt nor delineated, owing to the presence of the protuberant abdomen and the non-resonant fluid which it contains. We infer, however, from the upward curving area of dullness in the splenic region that the spleen is enlarged. The patient's urine averages eighteen ounces in twenty-four hours; the specific gravity runs from 1014 to 1020, albumen and sugar absent; the sediment contains no casts. The diseases which ordinarily produce extensive effusion of fluid in the peritoneal cavity in a patient of this age may be summarized as follows:

Cirrhosis of the liver, disease of the heart, particularly of its valves, nephritis, tuberculous peritonitis, or the inflammation of the peritoneum accompanying the development of malignant growths, pressure upon the portal vein by tumors or otherwise. The first cause mentioned is much the most frequent one. We may particularly exclude from consideration in this case hollow tumors filled with fluid, more frequently seen in the female sex, and at times rendering the diagnosis of ascites difficult by the fact that the area of dullness is circular, such as we get when the intestines, distended with gas, float upward upon the fluid in the abdominal cavity, and not crescentic, with the concavity downward, as in the case of a distended bladder or other hollow organ filled with fluid, arising from the pelvis or lower abdomen. The negative examination of the heart leads us to exclude it as the source of the ascites. Dropsy is likely, in cardiac, as in renal disease, to affect other portions of the body if extensive ascites be present; the negative character of the urine leads us to throw out of consideration nephritis of any kind. While ascites is the first manifestation of dropsy in liver disease, edema of the legs, feet and genitals may follow the distension of the abdomen in a purely mechanical way, as a result of pressure upon the veins.

In tuberculous peritonitis pain and fever commonly occur, while in both this and the cancerous variety we generally find tuberculosis or cancer elsewhere. Until the evacuation of the fluid we shall not attempt to positively exclude these causes, owing to the impossibility of properly examining the abdomen. At such time we may also examine for any tumor pressing upon the portal vein, but we have seen thus far no evidence of such a

growth. We may say, then, at present the diagnosis leans strongly toward hepatic cirrhosis. We have a distinct history of the use of strong alcoholic liquors, so common in this disease; we have diarrhoea, considerable digestive disturbance, flatulence, slight jaundice, emaciation, ascites and dropsy of the lower extremities. Even without the vomiting of blood or its passage from the bowels we strongly suspect cirrhosis, but will suspend the diagnosis until after tapping the abdomen, we may ascertain by percussion and palpation, the condition of the liver and spleen. Should the latter organ, as appears probable at present, be decidedly enlarged and the liver be found smaller than usual, and especially should it be found rough, or "hob-nailed" as it is in cirrhosis from the contraction about islets of liver-tissue of the hypertrophied connective tissue of the capsule, the diagnosis will be established. In the absence of abnormal signs affecting the liver we must consider contraction of Glisson's capsule about the portal vein without much accompanying cirrhosis, as in the case of the negress whom I showed you last year, and whose autopsy you attended.

We shall for the present place the patient upon milk diet and give half-drachm doses of compound jalap powder sufficiently often to cause the bowels to act several times daily, with the hope of reducing the ascites. If the latter be really from cirrhosis, removal of the fluid by tapping will do little good in a therapeutic way, since it will re-accumulate more rapidly after the procedure. I shall report to you as to the patient's progress at some future clinic. At present the prognosis is decidedly grave, for patients with hepatic cirrhosis commonly die within a few months after the diagnosis is established, if marked emaciation be present.

After tapping, the hobnailed liver and enlarged spleen were found, thus confirming the diagnosis.

SOME REMARKS BY DR. HOWARD A. KELLY,

At the American Medical Association Meeting.

Dr. Kelly discussed the conservative treatment of myomatous uteri, giving the results of his work done since 1890. He first sketched briefly the history of the subject, starting from the time when the tumor was unintentionally removed, having been mistaken for an ovarian tumor, to the era of modern hysterectomy, in which the uterus is removed by cutting down one side, across the cervix and up the other side. He then entered an earnest protest against the latter procedure as the operation of

choice and pleaded in behalf of myomectomy as the rule, with only occasional exceptions. Dr. Kelly argues that myomectomy is the operation of election in the treatment of "fibroid" uteri, especially:

1. In women under 40 years of age.
2. During or before the child-bearing period myomectomy should be performed (with only few exceptions), whatever the size, number or site of the tumors may be.
 1. As a rule, an exception should be made in excluding interstitial tumors in uteri larger than that of the sixth month of pregnancy.
 2. In cerebral inflammatory disease hysterosalpingoophorectomy is the operation to be performed.
 3. Nor should myomectomy be done as a rule when the paramount indication is the speedy removal of the pelvic mass (extreme anaemia, circulatory or chronic visceral disease).
 4. Hystero-myomectomy is preferable after 40 years of age unless myomectomy is the simpler operation, e. g., pedicled tumors.
 5. Myomectomy is not the operation of election in the presence of extensive lateral inflammatory disease.
 6. The various associated circumstances of the case will have to determine whether it is best to perform a myomectomy in the presence of a polycystic ovarian or of a dermoid tumor of one side.

The series reported include ninety-seven myomectomies, dating from October 11, 1890, to the present time. Eighty-four were white women and thirteen were negroes. Classified by decades the ages are as follows:

Twenty to 30 years, 12; 30 to 40 years, 44; 40 to 50 years, 36; 50 to 60 years, 5. Sixty were married, 34 single. Of the 63 married, 27 have never been pregnant. Menorrhagia occurred in 35 instances. Pregnancy complicated 3 cases. There were 4 deaths from peritonitis. The results are satisfactory in 88 cases. Three patients very recently operated on are not included. Two have had a return of the trouble. In 1 hystero-myomectomy was performed several years after the primary operation. The tumors occupied every conceivable position from fundus to cervix; varied in number from 1 to 17 in individual cases, and, indeed, Dr. Kelly has shown the feasibility of removing as many as 30 discrete tumors through multiple incisions. As regards the technique he urges:

1. The estimation of the difficulties of the case by a preliminary examination and after the abdomen is opened.
2. The avoidance of sepsis by

- (a) Avoiding any direct contact with the hands, the operator and assistants wearing rubber gloves.
 - (b) Avoiding unnecessary manipulations.
 - (c) Isolating the field of operation with gauze packing.
3. The prevention of hemorrhage (which may produce a focus of infection).
- (a) During operation by controlling the circulation through the uterine and ovarian vessels.
 - (b) After the operation by burying two or three layers of catgut sutures tied tight.
 - (c) By making sure of the perfect control, especially at the angles, by examining the field of operation or the dependant position before closing the abdomen.
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DIAGNOSIS OF ACUTE GASTRIC CATARRH.

By LEO B. AUERBACH, M.D.,

Ward, Colorado.

We understand by the term "Acute Gastric Catarrh" an acute catarrhal inflammation of the mucous membrane of the stomach. The causes are many and often very obscure. The most frequent cause of acute gastric catarrh is some direct injury to the mucous membrane. Taking food too hot or too cold, ice cold drinks, over eating, indigestible foods, highly spiced or very sour articles. Individual predisposition to the disease varies greatly. The symptoms often so simulate the beginning of typhoid fever that the physician at times is often baffled during the first week when treating this disease, and it is only after the first week (in some of these cases) that a definite diagnosis can be made. The onset is often insidious like that of typhoid fever, generally beginning with intense headache, temporal and occipital. These headaches are usually continuous. Nausea, loss of appetite, coated tongue, pain in the region of the stomach, and I have also detected tenderness in the right iliac fossa. A moderate fever is usually present; dizziness is a most prominent and disagreeable symptom. In some recent cases I have noticed that patients also complain of an aching in the limbs and soreness in the muscles, and a tired feeling in general. A patient with the above symptoms was told by his physician that he was threatened (if the word can be used) with typhoid fever. The patient was advised to go to bed and recovered in less than two weeks.

time, what was supposed to be an attack of typhoid fever. The diagnosis at times is not easy, and only by careful attention will an error in diagnosis be avoided. It is not my intention in this short paper to point out anything new, but simply to impress the necessity of a careful diagnosis in obscure cases of gastric catarrh, which is so frequently confounded with a beginning of typhoid fever.

TREATMENT.—To me one of the most obstinate symptoms to control is the severe headache, which oftentimes remains with the patient for weeks and even months after all symptoms of the disease have seemingly disappeared. In some cases I have tried almost every remedy in the materia medica for the relief of the headache, that so often remains with the patient, and then in my discouragement tell the patient it will wear off. At the beginning of an attack I generally give a powder containing Hydrarg. chlor. mit. and sodii bicarb., aa. gr. v. and follow it with a saline six hours after to cleanse the bowel. If there is much naucus, rectal injections are of value. The main treatment, however, consists in a strict regulation of the diet, and although milk is highly lauded by some authorities, I have found it injurious to most of my cases, even with the addition of lime water. I generally order a light diet, such as soft boiled eggs, toast and the like. Cereal coffee well diluted quenches the thirst and acts nicely. Above all things, rest in bed, if it can be procured, for I have noticed cases doing nicely in bed, and as soon as the patient would arise the headache would immediately return and dizziness and flashes of heat and cold also manifest themselves. The patient is to remain in bed till the appetite has returned and till digestion is at the normal. Internal medication is not of much value. I occasionally give ten to fifteen drops of the dilute hydrochloric acid in half a glass of water, which sometimes seems beneficial. However, if there are sour eructations and vomiting alkalies are to be given. For the nausea I generally have the patient swallow small pellets of ice, and the simple procedure of a cold wet cloth around the throat I find very efficacious in controlling the symptom. During convalescence I find that Strych. Sulph gr. 1.60 given three times daily after meals helps the patient along more rapidly.

HOSPITAL CLINIC.

By LEONARD FREEMAN, M.D.,

Professor of Surgery, Gross Medical College; Surgeon to Arapahoe County
Hospital and St. Anthony's Hospital,

Denver, Colorado.

[Clinic held at the Arapahoe County Hospital, Sept. 9, 1906.]

I shall present for your consideration to-day three cases. Although they are commonplace enough and possess no startling features, I think they will be of interest to you. The first is a severe railroad-crush, caused by the passage of one or more car wheels transversely across the leg just below the knee. Upon inspecting the member you will notice a peculiar phenomenon, which occasionally occurs in these injuries. Although the bones are manifestly crushed to fragments and the muscles to a pulp, the skin, excepting a trivial discoloration, remains apparently uninjured, excepting a small hole through which oozes a little blood. When the patient was brought to the hospital yesterday evening it was decided not to amputate the limb at once, although ultimately the operation would have to be done. The fact that the skin remained unbroken rendered the danger of delay less than it would otherwise have been; and it was desirable that the patient, a somewhat old and flabby man, should have time to recover from the shock from which he was suffering. It was also not quite clear that the limb was absolutely lost, for although there was no pulsation in the posterior tibial artery, there was some dispute as to the existence of a feeble beat in the dorsalis pedis. Besides this, the foot was warm.

In order to combat the existing shock, strychnia and whiskey were ordered at regular intervals, together with high injections of hot salt water into the colon. In addition, saline solution was injected beneath the skin. The last mentioned procedure is of great value in many conditions, such as shock, hemorrhage, sepsis, uraemia, etc. Lejar, who has written much on the subject, calls it "washing the blood," and claims that it assists in the elimination of poisons which that fluid may contain. He regards it of great value in otherwise almost hopeless cases of suppurative general peritonitis. I shall now make such a subcutaneous infusion, in order to show you how easy the operation may be performed. The normal salt solution (.6 per cent.) should be somewhat above the temperature of the body. As you observe, it is contained in an ordinary fountain syringe, carefully sterilized, to the tube of which is fastened an aspirator needle.

A spot upon the sterilized skin of the patient's chest is now frozen with chloride of ethyl and the needle inserted into the subcutaneous cellular tissue, first permitting a stream of the solution to run through the tube in order to expel the air. Observe how the skin puffs up as the liquid flows beneath it, and how the swelling spreads out as I stroke it with my fingers. It is astonishing how much fluid can be inserted in this way, and how rapidly it is absorbed into the circulation. The patient being stone deaf, I can speak freely before him, and say to you that his chances are not very good, as indicated by his feeble reactive power. Before the salt infusion his pulse was 136. Within half an hour afterward it has dropped to 126. (In the course of thirty hours the patient reacted fairly well from the condition of shock, and at the end of forty-eight hours an amputation was done at the middle of the thigh, salt solution being continuously injected beneath the skin. The operation was well borne, the wound healing by first intention).

The second case, a strong, apparently healthy man, presents a considerable tumor below Poupart's ligament, which came on suddenly about four weeks ago with pain and tenderness, and which has been getting worse ever since. He was sent to Denver with the diagnosis of "rupture." You will notice that the swelling is hard, irregular and tender. For a hernia to be so tense it would have to be strangulated; but there are no symptoms of strangulation—no vomiting, constipation or gastro-intestinal disturbances of any kind. Careful palpation reveals a number of distinct enlarged glands and renders the diagnosis certain. Such a bubo usually arises either from an affection of the genital organs or from some lesion upon the foot or portion of the lower extremity. But neither of these conditions exists in the present instance. The trouble has appeared too suddenly for tuberculosis or malignant disease. In fact we have been able to discover no cause except violent exertion in a harvest field. Considering that the difficulty has been steadily increasing and that the man is anxious to return home as soon as possible, I consider it advisable to remove the glands, if possible without rupturing them. The incision is made parallel to Poupart's ligament in order that the scar shall lie within a fold of the skin. The hemorrhage, although brisk, is easily controlled. I find that the enormously swollen glands are not only adherent to the sheath of the great vessels, but also pass internally to the vein and beneath it. Great care must be used not to wound the femoral vein, which has sometimes been done. The dissection must be made cautiously and with a blunt instrument. The undermost gland is so firmly attached to the vessel that I find it necessary to remove it with

a Volkmann's spoon. On loosening the hemostatic forceps I find that hemorrhage has ceased so that no ligatures are required. After uniting the edges of the wound with a continuous silkworm gut suture, I insert a small gauze drain and apply a firm compress. Upon cutting into the glands which have been excised, I find them filled with numerous purulent foci, indicating that they would probably have broken down into a large abscess if they had been allowed to remain. (The further progress of the case was uneventful.)

The third patient, whom I now present to you, is inflicted with a large carbuncle on the back of the neck. The urine is normal, although it often contains sugar or albumen in these cases. Carbuncles are usually due to an infection with the *staphylococcus pyogenes aureus*. They are more or less extensive, flat, brawny, copper-colored or bluish swellings, and are generally found where the skin is thickest, upon the neck or back, although they are not confined to these situations. Unlike a boil, they nearly always present numerous small openings, corresponding to the *columnae adiposae*, through which the pus finds its way from the subcutaneous cellular tissues to the external surface. The pus is confined, at least primarily, in separate compartments, formed by the firm fibrous adhesions of the skin to the underlying structures. In short, a carbuncle consists of a number of boils grouped together, as it were, under one roof. The symptoms may be trivial or they may be so severe as to lead to collapse and death. The treatment may be directed accordingly. In some cases hot antiseptic fomentations combined with frequent irrigation of the pus cavities, may suffice. In other cases more radical measures are necessary, such as incision and curetting, the use of the thermo-cautery or complete excision of the inflamed area. In the case now before us the symptoms are not severe, although the carbuncle is a large one. I consider it best to make a number of firm, deep incisions in various directions entirely across the tumor, intersecting each other in the center. The distinct foci of suppuration are separated by such firm walls of connective tissue that it is with difficulty that I break through them with the sharp spoon which I am using. I now trim away much of the infiltrated and necrotic skin and other tissues, and mop out the cavity with a 1-1,000 solution of bichloride of mercury. The large hole left in the neck will contract much as healing progresses, and if desirable skin-grafting may be done later on. The incisions are to be kept open and the wound dressed with iodoform and hot bichloride fomentations. (In the course of the next two or three days the carbuncle, although checked on three sides, extended on the other, where further incisions became necessary. The case is now progressing satisfactorily.)

THE CLIMATE OF DENVER AND ITS VICINITY.

By CHARLES DENISON, M.D.,

Denver, Colorado.

In writing a condensed description of the climate of this region, one must presuppose that the reader has access to books of reference* for supplying details and verifying statements made. Besides, it is well to eliminate all side issues and limit the discussion to only respiratory and circulatory diseases. Every change of air pressure which affects the lungs must influence the heart also, because of their interdependence.

Geographically we will have to confine our study to a section between 4,000 and 7,000 feet elevation, east of the main range, north of the "divide," in the northeast end of the state, and nearly in the center of which Denver lies.

Altitude above sea level is the leading peculiarity of this climate. On the steps to the state house building in Denver is the "mile above the sea" point. A little higher than this (6,000 feet) marks a degree of rarefaction of the air equal to one-fifth the pressure at sea level. A traveler coming westward has left out of the given amount of air he usually breathes one-fifth of the oxygen the air contains at sea level, and he must make it up here by breathing a fifth more. If he be well, this does not inconvenience him; in fact, it is exhilarating, and therefore pleasurable. Admitting this one-fifth loss of oxygen at 6,000 feet elevation, the effect is not extreme, because the deeper and faster respirations and increased heart action here are compensatory. However, take a man with one-fourth to one-half his lung space involved in inflammatory or catarrhal consumption, with the usual collapsing and contracting of the lungs, and the requirements on first arrival may be too great for him to exercise as much as he could at sea level. He must get used to the altitude, and this adjustment of his heart and lungs to the new conditions is the acclimatization which, once well accomplished, may mean his restoration to health. Many associated conditions of the climate favor this happy change. One of the chief of these is the quality of dryness. The relative humidity of the air averages perhaps

* NOTE—"The Climate of Colorado for Pulmonary and Kindred Diseases," is a more complete, yet condensed, argument based upon the attributes of climate, lately written by the author by request of the Denver Chamber of Commerce Committee. It will soon be published and sent to any one so requesting of the Secretary.

Exhaustive studies of the subject of climate for reference can be found in the following:

"The Treatment of Lung Diseases by Climate," by Dr. C. Theodore Williams. McMillan & Co., London and New York.

"Medical Climatology," by Dr. S. Edwin Rolly. Lee Brothers & Co., Philadelphia.

"Climates of the United States in Colors," by author. The W. T. Kuners Co., Chicago.

"The Rocky Mountain Health Resorts," by author. Houghton, Mifflin & Co., Boston.

less than 50 per cent. of saturation in the region here specified, while 70 to 75 per cent. or over is averaged at sea level, and the record is variously estimated at 60 to 70 per cent. for intermediate points. The reasons for this dryness are the dry, sandy soil and the scanty tree growth, which afford quick drainage, and the scarcity of rivers and lakes in the section named. The cloudless sky likewise should be mentioned, as in such an open country it affords a long daily exhibit of drying sun's rays, made more effective on every subject they strike because they are not intercepted by a stratum of the earth's atmosphere a mile thick.

Then the locality has much to do in increasing this quality of dryness, i. e., the distance from the sea or any large bodies of water. For instance, the air which has left the Pacific coast with 80 per cent. of saturation, to cross successive ranges of mountains, has become colder and colder and deposited almost all its moisture, and when the winds reach here from the west and southwest they are the driest and warmest we have. The wind which does not blow fast but does blow the longest of any, is the southeast, while that which gives quick movement and rapid changes is the north and northeast. Easterly winds rise as they approach the high mountains, and probably the others, from the west, do not all come down as they leave the height; for down on the plains, as at Denver, there is a decided calmness compared with the rest of the United States. In the list of 132 signal stations keeping records of total wind movements, Denver stands ninety-fifth, Pike's peak being the first, North Platte, Nebraska, the sixteenth. For comparison we note that Philadelphia is the thirty-fourth, New York the forty-fourth, Boston the forty-eighth, Cleveland the forty-first, Chicago the fifty-ninth, Milwaukee the nineteenth and San Francisco the fortieth, in comparative windiness, of all the principal signal stations of the United States.

The air, as it rises, coming up from the North Missouri river valley, should get colder at about a rate of 3° Fahrenheit to each thousand feet rise. But coming southwest over the warm and dry land, this usual cooling process is partly neutralized and the moisture is not condensed, as it would be if the wind came directly west over a wooded region or over a damp or clay soil. So the north or northeast winds, or those from the Dakotas, are the ones which give us the little rain we have (about fifteen inches per year), and this comes in warm weather, when it is most desired for agricultural and pastoral needs. All this contributes to the dryness of the fall and winter months, a season when physicians consider this climate preferable for curable cases of tubercular lung disease.

This introduces another quality which contributes much to the dryness of this section. We refer to the coolness of the air according to the recorded temperature, notwithstanding there is so much sunshine, and the air seems to be a great deal warmer than the thermometer indicates. Again, the increased absorbent effects of the cold, dry air upon the lung membranes, abstracting moisture (and with it disease) from the air passages, is an important feature of the high climate. This evidence of the dryness and its good effects is positive and has never yet been disproved.

The conditions of the climate, therefore, are all favorable for the distension of an enfeebled lung with pure air. Impurity being absent, malaria being almost unknown, and, provided the possibilities of imported infection are guarded against, there is nothing superior to this Colorado air. There is nothing purer or cleaner, excepting during an occasional short dust storm, than this sun-laden atmosphere when taken "first hand," i. e., out in the country, and there is room enough for all who desire to take it that way.

In summer, when the heated conditions in a paved and thickly built up city like Denver neutralize the coolness and clearness of the air, there are lovely villas, mineral springs, camping-out grounds and parks in the adjacent mountains, where the weary mind and body finds diversion in picturesque spots and delightful scenery. Invalidism is thus won over to health by mountain climbing, hunting, fishing and other pleasurable activities incident to a life in the hill country.

We do not claim, as many physicians wrongly do when sending patients here, that the climate alone is sufficient for the cure of chronic pulmonary ills, but we do claim that it is the most potent of all aids to a cure. Whether the proper appreciation of the climatic question is 20, 30 or 40 per cent. of all that can be done for a given consumptive invalid, yet a wise individualization and proper use of other aids should not be neglected, as systematic exercise, good feeding, seasonable inhalations and other direct treatment of the case in hand, under the guidance of a resident physician.

The greatest desideratum of all is that the health-seeker resort to this inland high climate before it is too late. The season of the year or any other consideration does not equal that of taking the case in hand before there has been any breaking down of lung tissue, whether due to tuberculosis, catarrh or chronic inflammation, with or without hemorrhages. If scientific knowledge applied to the early detection of pulmonary tuberculosis and to the application of proper climatic relief were everywhere sufficient to recognize this desideratum, the result from the com-

ing to Colorado of selected invalids would be uniformly favorable. Unfortunately investigation is often tardy or liable, like all human effort, to err. Invalids procrastinate and conditions are perverse; so it happens that the great majority of incoming consumptives have already the third or last stage of the disease in some portion of their lungs.

It is preferable, if possible, that high daily fevers shall have been allayed before coming; and the same may be said of existing pleurisy or active hemorrhages. After this, hemorrhagic and inflammatory cases are the most favorably influenced of all varieties.

The climate seems to be eliminative of malarial poison, if already this uncertain complication has not too much aggravated a tubercular infection. Youth is no bar to the resort to high altitudes, but a reason for it, if otherwise indicated. Old age is more of a bar, for acclimatization is correspondingly more difficult when serious lung disease has impaired one's ability to exercise. Most serious heart diseases, and advanced and active disease in both lungs are, however, contraindications. On the other hand, asthma, if it is pure bronchial or spasmodic asthma (not too much complicated with emphysema or bronchial dilations), is a most promising disease for the high altitude. The spasmodic contraction of the bronchial tubes, so characteristic of simple asthma, seems to find an elevation where the distress is gone and the breathing is free. This happens perhaps at Denver, or one or two thousand feet higher. Many of the present residents of this locality were once asthmatic, and are here comparatively free from the disease. In fact, a personal study of our Rocky mountain civilization will show that the life, energy and successful growth of this section is largely contributed to by the healing influence of our dry, sunny, electrified and rarefied atmosphere in consumption, bronchitis and asthma.

DEATH RATE.

The death rate in the city of Denver during the past twelve years will be shown by the following table:

Year.	Total Deaths.	Rate per 1,000.	Year.	Total Deaths.	Rate per 1,000.
1886.....	1,119.....	15.98	1892.....	1,713.....	14.28
1887.....	1,525.....	19.06	1893.....	1,734.....	13.87
1888.....	1,729.....	20.34	1894.....	1,688.....	12.06
1889.....	1,803.....	18.75	1895.....	1,626.....	11.14
1890.....	2,530.....	23.71	1896.....	1,571.....	10.48
1891.....	2,118.....	18.59	1897.....	1,798.....	11.29



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We will at all times be glad to give space to well written articles or items of interest to the profession.

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EDITORIAL DEPARTMENT.

Medical Colleges Must Come to Time. The American Medical Association at its recent meeting unanimously adopted the following:

WHEREAS, The American Medical Association did, at Detroit in 1892, unanimously resolve to demand of all the medical colleges of the United States the adoption and observance of a standard of requirements of all candidates for the degree of doctor of medicine which should in no manner fall below the minimum standard of the Association of American Medical Colleges, and

WHEREAS, This demand was sent officially by the permanent secretary to the deans of every medical college in the United States and to every medical journal in the United States; now therefore, the American Medical Association gives notice that hereafter no pro-

fessor or teacher in, nor any graduate of, any medical college in the United States, which shall after January 1, 1899, confer the degree of doctor of medicine or receive such degree on any conditions below the published standard of the Association of American Medical Colleges, (shall) be allowed to register as either delegate or permanent member of this association.

Consolidation. The Atlanta Medical College and the Southern Medical College have united under the name of "The Atlanta College of Physicians and Surgeons." This suggests the amalgamation business in Denver last year. Notices appeared in the various journals, and especially in the Denver daily papers, that the faculties of the University of Denver and the University of Colorado had united, forming a strong aggressive faculty, and that the State School had gone out of existence. Later a counteracting statement was published that the better part of the faculty of the State School, together with the faculty of the Gross School had united. Later a statement was published that the State School had gone out of existence, and later events have proven the last statement to be true. We wonder if the Atlanta doctors are engaged in like medical college squabbles.

Home-Made Koumiss. The *Dietetic and Hygienic Gazette* furnishes the following recipe: Fill a quart champagne bottle to the neck with pure cow's milk; add two tablespoonfuls of white sugar, first dissolving it in a little water by aid of heat; add also a quarter of a two-cent cake of compressed yeast. Then securely fasten the cork in the bottle and shake the mixture well; place it in a room having a temperature of from 70 to 80 degrees F. for six hours and finally in the ice-box for about twelve hours. It is then ready for use and may be taken in quantities varying with the requirements of the stomach and general condition of the patient.

Bolles et Bolles. There lies before us the announcement of the "Western Institute of Osteopathy," located on Colfax Avenue, and run by a certain Bolles and his wife, "in close touch with Dr. A. T. Still, the founder of the science." The "course" is arranged in four terms, two in each year, and embraces "lectures" on histology, pathology, anatomy, chemistry, physiology, psychology, psychiatry, osteopathic diagnosis and practice, etc. So far as the "bulletin" shows there are only two persons in this faculty, namely, Mr. and Mrs. Bolles. It is to be presumed that what Pa Bolles don't know about the various subjects, Ma Bolles does, for between them they must know it all. The tuition fee for the course, which is payable strictly in advance, is \$500! In other words, the doughhead applicant for a D.O. degree must put down all the "dough" before he can even enter "into touch" with Bolles and Bolles. Yet he should not complain, for does he not have at the very outset an intensely practical lesson in "pulling the leg?" Great is the "Western Institute of Osteopathy" and long may it waver!

The Average Patient. The average patient sends for a doctor in haste and repays him at leisure.

The average patient is apt to estimate a physician's ability by the amount of atmosphere he displaces.

The average patient likes to be humbugged. Any old fad will do so long as it has a new name.

The average patient is willing to pay ten times as much for cutting off his leg as for saving it whole to him.

The average patient, when nearly well of a sickness, will take a bottle of Rotgut's Relief or a box of Poopendike's Pills, and to these will he give all the glory, and "the doctor be d——d."

The average patient believes that the os humerus is the funny bone and that the seat of all the finer emo-

tions is in the heart, but he thinks he knows more than the doctor, if he could only express himself.

The average patient has just enough of medical learning to misquote. Best tell him simply that he is sick and that you can make him well, perhaps, if he takes the medicines according to directions.

Unilateral Loss of Pupillary Light Reflex. After a systematic study of all the literature upon this subject, Dr. William S. Leszynsky (*New York Medical Journal*, Aug. 6th) concludes that unilateral reflex iridoplegia is usually of syphilitic origin, though it may arise in tabes or parietic dementia, becoming bilateral in time. It often occurs as a remote result of diseases of the third nerve or its nucleus, and may be the only demonstrable clinical evidence of a pre-existing motor oculi paralysis. It is always indicative of central nerve degeneration, involving either the oculomotor nerve or its different branches. The direct lesion is situated in the centrifugal portion of the reflex mechanism.

Mississippi Valley Medical Association. The following is the preliminary program for the meeting of Mississippi Valley Medical Association, at Nashville, October 11-14, 1898: B. Sherwood-Dunn, Boston, Mass., "Why I Have Abandoned the General Practice of Vaginal Hysterectomy;" J. A. Stucky, Lexington, Ky., "Tonsillitis or Quinsy, Causes and Treatment;" H. W. Whitaker, Columbus, O., "Pichi;" A. Ravogli, Cincinnati, O., "A Few Practical Points in the Treatment of Posterior Urethritis;" Frank Parsons Norbury, Jacksonville, Ill., "The Neuro Hypothesis of Rheumatoid Arthritis;" A. M. Osness, Dayton, O., "Diphtheria and Its Logical Treatment;" F. E. Kelly, La Moille, Ill., "Varicocele;" F. F. Bryan, Georgetown, Ky., "A Plea for Pelvic Peritonitis and Cellulitis;" John M. Batten, Pittsburg, Pa., "Syphilis;"

Geo. W. Johnson, Dunning, Ill., "Gonangiectomy and Orchidectomy for Hypertrophied Prostate in Old Men;" Geo. F. Keiper, Lafayette, Ind., "Wounds of the Lachrymal Apparatus, Report of Operation for Restoration of Canaliculi Obliterated by Traumatism;" Shelby C. Carson, Greensboro, Ala., "A Consideration of the Limit to Operative Gynecology;" W. H. Humiston, Cleveland, O., "The Relations of the Gynecologist and the Neurologist;" W. Gaston McFadden, Shelbyville, Ind., "Intermingling and Changing of Type in Diseases;" William F. Barclay, Pittsburg, Pa., "Mercury and Its Action;" J. Rilus Eastman, Indianapolis, Ind., "The Diagnosis of Gonorrhea in Women;" S. E. Milliken, Dallas, Tex., "Sub-Periosteal Removal of Caries from the Pelvic Basin, with the Report of Cases;" Thos. Chas. Martin, Cleveland, O., "Complete Inspection of the Rectum by Means of Newer Mechanical Appliances;" Geo. D. Kahlo, Indianapolis, Ind., "Hydrotherapy in Stomach Diseases;" Alex. C. Wiener, Chicago, Ill., "Surgical Treatment of Infantile Paralysis;" James M. M. Parrot, Kingston, N. C., "Supra-Pubic Cystotomy vs. Perineal Section;" R. C. Pratt, McKenzie, Tenn., "Report of Cases in Obstetrics, with Complications;" John L. Jelks, Memphis, Tenn., "The Relationship Between the Genito-Urinary Tract and Rectum, with Special Reference to the Female;" T. Virgil Hubbard, Atlanta, Ga., "How Should We Treat Typhoid Fever;" W. W. Taylor, Memphis, Tenn., "A Clinical Contribution to Ectopic Gestation;" M. Goltman, Memphis, Tenn., "Interesting Surgical Cases;" I. N. Love, St. Louis, Mo., "The Bicycle from the Medical Standpoint;" Jos. Price, Philadelphia, Pa., "Surgical Treatment of Pus in the Pelvis;" Andrew Timberman, Columbus, O., "Operations on the Mastoid, When and How Performed;" R. A. Date, Louisville, Ky., "Arthritic Diathesis;" Chas. W. Aitken, Flemmingsburg, Ky., "Diagnostic and Therapeutic Uses of Tuberculin;" G. W. Halley,

Kansas City, Mo., "Some Pathological Conditions of the Ovaries and Adnexa Causing Pain." The above is a partial list of the papers promised, which I will appreciate your publishing in an early issue. Very truly yours, Henry E. Tuley, Secretary.

Surgical Treatment of Insane Persons. Dr. A. T. Hobbs, of the London, Ontario, Asylum for the Insane, gives a summary (*American Journal of Surgery and Gynecology*, July) of 110 cases operated upon for gross gynecic lesions. Of twelve ovariectomies done, seven patients recovered mentally, four improved and one died from complicating pneumonia. In seventeen hysterectomies, five recovered mental and physical health, three improved and two died. Replacement of the uterus was performed by operation in twenty-two patients, only four of whom have regained their normal mental state, though eleven others have shown more or less improvement. Of thirty cases in which the chief operation was the removal of diseased cervixes, twelve are now well mentally and nine others have improved. In twenty-one cases of minor uterine diseases, treated mainly by curettement, there recovered twelve and two improved. The remaining eight cases embraced operations for vaginal lesions, fistula, etc, and yielded no psychic results worthy of note. The total reckoning shows mental cure in 36 per cent., and an improved status in 29 per cent. The writer states emphatically that many of those who recovered would not have done so without surgical interference.

Rest for the Weary. Dr. Charles H. Hughes, editor of the *Alienist and Neurologist*, has something to say on this subject so altogether true and appropriate that we need not apologize for reproducing his remarks in full:

"If we use the machinery of our minds and body aright, taking the same pains in its resting, running

and oiling as the mechanic does of a steam or electric engine, it will work well for us, keeping time to nature like our watches to the sun, but abused, our own organism will serve us as our watches would if badly used. The time to rest is when nature tells us we are tired. We should not then apply the whip and spur of stimulation further, except for exceptional purposes, when, through previous refraining, we have a reserve of vital force to expend on extraordinary occasions. We should rest much and often between work, that this reserve of force may accumulate in our nerve centers like water in a well when we stop the pump a while. *The time to rest best* is nightly after each day's labor, that the raveled sleeve of business care may be rewound. The place is that which may furthest remove the mind and body from influence of the causes that produce the weariness, and the "how" is in such manner, in such place, at such time and under such circumstances, as personal or medical experience may counsel. When the system is greatly broken, to one person rest may come best at home, to another away from home, to a third it may be best secured through a congenial and diverting recreation, to a fourth through a cherished form of relaxation, and to a fifth it may be best brought about by oblivious stupidity and inaction of a kind of Rip Van Winkle sleep till the strain of the past and the demands of the present are dead and a desire for a renewed life comes back to the awakened sleeper.

"As to where and when, the theologian might answer your question easiest. He would answer Heaven, and would then only have to answer how. Heaven, however, is not within the realm of the physiologist or the neurologist, and as it is conducted on a gold basis, its streets being paved with the yellow metal, you might rest easy in the discussion of this subject 'on this line.' So I start again.

"The prime essential of a restful life is a healthy organism and the essentials of a healthy organism are regulated labor of mind and body, with disposition to sleep, to eat and to act again, the normal rythm of mental and physical life, the healthy waste and correlative repair of the machinery of man's body and mind. The human organism within nature's time limits is a perpetual motion machine, so far as waste and repair are concerned, being alternately wasting and repairing, having its own mechanisms of repair, and capable of providing for its own reconstruction from day to day."

**New School of Scientific
Medicine.**

We believe that the following editorial, which appeared in the August issue of the *Medical Times*, of New York, a homoepathic medical journal, edited by Drs. Edward Guernsey and Alfred Kimball Hills, will be read with considerable interest; at least we venture to reproduce it without comment. We have had considerable to say on this subject in the past and in some future number we will probably be heard from again, especially with reference to this editorial:

"Surgeon-General Sternberg, in his recent address, as president, before the American Medical Association at Denver, repudiates the title of '*Old School*' as applied to the fast filling ranks of scientific thinkers in the medical profession, and substitutes another name, that of '*The New School of Scientific Medicine*.' This name is not original with the surgeon-general and president of the American Medical Association, but was voiced years ago in the columns of the *Medical Times*, and was received with sneers by the so-called '*Old School*,' and a howl of indignation, misrepresentation, and abuse by many of the journals and would-be-leaders of the new school, all of which contended that the time had not come for a union in work and investigation under the folds of one flag. More than ten years ago one of the editors of this journal gave notice at a meeting of

the American Institute of Homoeopathy, that at its next meeting he intended to move that the name of the institute be changed to that of the '*American Institute of Scientific Medicine*,' basing his reasons for the change that the trend of scientific investigation in all schools was along the same lines, and was reaching conclusions so impregnable as to elevate the profession from the domain of empiricism, with its warring factions, to the ranks of science. 'Much as the "new school" had accomplished in the way of scientific medicine, and proudly as it might point to its records of the practical good it had accomplished and the change it had produced in medical thought and practice throughout the world, it was hampered and its usefulness impaired by a sectarian name, which was very far from voicing or defining its actual work. We are physicians pledged to one of the noblest duties to which humanity can be called, upon the proper fulfillment of which depends to a certain extent not only the welfare of the body, but of the soul. It is ours to penetrate with the light of science the dark chambers of disease, to cleanse the channels of life and say to the "pestilence which wasteth at noonday: thus far, but no farther." The time has come for a union along scientific lines, for independent thought, for free investigation in which no creed or path shall be permitted to block the way. This school, which has done so much for humanity, can well afford to take the initiative in a movement which sooner or later will dominate the medical world.'

"This proposition was received with such a storm of derision that no future effort was made to carry it into effect. The *Medical Times*, however, has kept steadily on with its work, firmly believing in the correctness of its proposition and without a single doubt of its ultimate triumph. Scarcely a decade has passed when the surgeon-general of the United States advances, as president of the American Medical Association, gathered at Denver from every state in the union, with

all the weight of the medical head of an army whose heroic deeds are now thrilling the hearts of civilized nations throughout the world, precisely the same idea presented in the American Institute of Homeopathy, backed by almost the same argument. Indeed, that portion of Gen. Sternberg's address, in which he claims that the term 'old school' is entirely inappropriate, and insists that for a profession which, as a whole, within the past few years, has been moving forward with such incredible activity upon the substantial basis of scientific research, if characterized by any distinctive name, it should be the '*New School of Scientific Medicine*,' is almost precisely in spirit and in language like the editorials which have so often appeared in the *Times*.

"The emphatic assertion that 'there is now no room for creed and pathies in medicine any more than in astronomy, geology or botany, and that every man is entitled to his own opinion upon any unsettled question, and that no restriction should be placed upon any regularly educated physician, as to his mode of treatment in any given case,' did not meet with the endorsement of all in the society. When the motion of Dr. Hare, the distinguished author and teacher, was presented, 'That this association invites the New York State Medical Society, the New York County Medical Society, the New York Academy of Medicine and other societies of good and regular standing to send delegates to this association,' it was too much for one of the members, Dr. Munn, of Denver, who denounced the resolution as the inoculated scalpel by which it is proposed to introduce the sepsis of commercialism into the association. 'In this Western country,' said Dr. Munn, 'we have had all we could do to keep out the dead rot of commercialism, and are we going to be trodden down by this derelict, dead, rotten society of New York, which is continuously sending—' A storm of hisses rendered the final words of the closing sentence

inaudible. Every one has heard of Dr. Hare; his works are found in almost every medical library, but who has heard of Dr. Munn? What have the societies mentioned in Dr. Hare's resolution done to be characterized as dead and rotten, and held up to the contempt of the American Medical Association by Dr. Munn and his confreres? Simply broken loose from an association in this state controlled by an iron-bound code of ethics, and established one with no code of ethics but that of the gentleman. These societies are composed of some of the most advanced men in the state, who have stepped out of the thralldom of the sixteenth century into the light and freedom of an age teeming with life and progress. Possibly the American Medical Association will learn, at no distant day, that the walls of truth stand, but the walls of denominational separation are crumbling. Let the standard of the new school of scientific medicine be unfurled, and the thoughtful, unprejudiced minds of all schools will rally to its support."

Death of Dr. William Pepper. The death of Dr. William Pepper, of Philadelphia, removes from the profession one of the ablest and best known physicians in the United States. Dr. Pepper died in California, where he had been spending some time in search of health. His disease was said to be angina pectoris. It is said that Philadelphia owes more to Dr. Pepper than to any other man. He has been actively engaged or interested in every public enterprise that has come to the front during the past twenty-five years. The medical world, as well as the people in general, can ill afford to lose such a man as Dr. Pepper. The doctor was only 55 years of age.

A Shameful Monopoly. Herr Behring, one of the band of discoverers of diphtheria antitoxin has besmirched his crown of glory with mercenary mire. After over three years of effort and five distinct

refusals, he has been granted a patent on this preparation by the Board of Appeals at Washington, on the sole ground that his work along this line has helped to reduce the diphtheria mortality. Immediately following this decision, the great (?) man's mercantile promoters, Lucius and Bruning, of the Hoechst Farbwerke, served notice on the leading American manufacturers that suit would be instituted if the alien monopoly were not respected. A keener edge is given to the galling effect of foreign rapacity by the fact that patents on medicine and foods are not permitted either in Germany or in France.

Besides being in direct contravention to the very essence of the scientific medical spirit, which freely makes public every discovery of benefit to suffering humanity, Behring's claim to be the exclusive inventor or discoverer of diphtheria antitoxin is in the nature of what is popularly known as a "steal." That is to say, his work was but one link in a chain including the names of Roux, Kitasato and, above all, Pasteur. As regards priority of artificial immunization, Dr. Henry Sewall, of this city, was among the earliest pioneers, having eleven years ago immunized pigeons against rattlesnake poison. The truth is that the antitoxin method of treating disease is a composite development of many minds and not the single achievement of one man. This is well illustrated by the award of the antitoxin prize of the French Academy of Science jointly to Roux and Behring. The preposterous injustice of granting an American monopoly to this impudent foreign appropriator would be almost ludicrous were it not for the hardships that must ensue to the consumers of exclusively controlled products, and thereby to the little children, through failure to utilize the remedy because of its high price. However, the pretensions of this foreign corporation will be fought, we believe, to the reversal of an unwise decision (for justice is not always blind) and in the meanwhile the American

profession will use home-made antitoxin more than ever, or better still, employ this only to the exclusion of all others.

Medical College Association. At the last meeting of the Association of American Medical Colleges the constitution was amended as follows:

A college not giving the whole four year's course of the medical curriculum and not graduating students, but otherwise eligible, may be admitted to membership. At this same meeting Dr. Henry O. Walker, of Detroit, presented the following resolution:

RESOLVED, That a committee of three be appointed to ascertain the amount of work being done by the several colleges, members of this association, and offer such amendments to the constitution as may seem fit to them for consideration and action at the next annual meeting.

The president-elect appointed the following committee: E. Fletcher Ingals, Chicago; John C. Oliver, Cincinnati, and Thomas H. Hawkins, Denver.

The Benefits of Fumigation. As convincing proof of the value of sulphur fumigations in preventing complications in acute infectious diseases, Dr. John Zohorsky (*Medical Council*, July) narrates the following bit of history:

"At the Episcopal Orphan's Home (St. Louis) recently we had thirty cases of measles. One-half of these were placed in the contagious ward, a building separated from the rest, but which had been thoroughly cleaned and fumigated. Not a single complication occurred among this number. But the fifteen cases which remained in their old quarters were not so fortunate. Three cases of suppurative otitis, one of slight bronchopneumonia, and two of severe and per-

sistent bronchitis were the sequelae. One child also developed severe catarrhal laryngitis with stenosis, so that intubation had to be performed."

Simple Devices for the Relief of Insomnia. Among the simplest and best mentioned by Dr. A. K. Bond (*Maryland Medical Journal*, July 23d)

are the hot lunch at bed time, the hot water bag to the abdomen, heat to the feet, the cool vinegar fillet on the brow, the pillow of hops or other fragrant substance, the change to the other side of the bed with fresh beaten pillow, a half hour in a couch or in an arm-chair before sleeping time, massage, sponging of the body with a fragrant tonic wash, reading to sleep, or diverting conversation, a quiet room with freshened air and low, shielded light. Music, he says, to which the mother, by instinct, the world over, betakes herself as a trusted hypnotic for her infant, is for some strange reason never used in the adult.

The Effects of Diet on Lactation. Taylor and Wells, in their *Manual of Diseases of Children*, state that where the total quantity of milk is

too great, the amount of liquids and the diet should be decreased. Where the total amount of solids is too small, the nursing intervals should be shortened, the amount of liquids decreased and less exercise should be recommended. Where the total amount of solids is too large, the nursing interval should be prolonged, the amount of exercise should be increased, as should also the proportion of liquids in the mother's diet. Where the fat is deficient in quantity, the proportion of meat in the diet should be increased. The reverse of this is indicated when the amount of fat is too great. If the percentage of proteids is too low, exercise should be decreased and the amount of proteid diet increased. Where the amount of proteids is too high, exercise should be increased up to the limits of fatigue and the

proteids in the diet decreased in quantity. For deficient total secretion of milk, a diet largely of proteids, particularly meat extract, soups or broth, is indicated. Next in efficiency comes milk, cocoa or chocolate taken at meals once or twice a day. Among galactagogue drugs the authors mention castor oil as foremost—10 to 15 drops in a soft capsule four or five times a day.

The Relation of the Typhoid Bacillus to Enteric Fever.

In concluding his Croonian lectures on the chemical products of pathogenic bacteria, considered with special reference to enteric fever (*British Medical Journal*, July 9th) Sidney Martin maintains that the infection in this fever is primarily intestinal and that the local effects on the intestine is due to the poison of the typhoid bacillus and not to the germ itself. "The part of the intestine affected—namely, the Peyer's patches—is the least protected part of the mucous membrane and is a tissue of only slight metabolic activity, covered with a single layer of epithelium, with no villi; whereas the rest of the mucous membrane is covered with villi, which are more or less constantly in a state of active metabolism.

The Nature and Cause of Simple Nasal Catarrh.

Fermi and Bretschneider (quoted in *July Journal of Eye, Ear and Throat Diseases*) conclude that simple coryza is not a parasitic disease. Most colds, they say, result from an exciting agent, which exercises physical, chemical or mechanical irritation, either from without (wounds, dampness) or from within (iodine, contagious disease and eruptions) upon the nasal mucous membrane. Common coryzas are based upon trophic vasodilatation of the mucous membrane and are of a nervous character. They are not attributable to cold as such, but to active and severe variations of temperature and great dampness in the atmosphere.

The Palmo-Plantar Sign of Typhoid Fever. Question (translated in *Medical Review of Reviews*) describes this hitherto unrecognized sign of obscure pathology as follows:

1. In certain febrile affections (typhoid fever, acute articular rheumatism, tuberculosis) the palmar and plantar regions take on a special yellowish coloration, and during convalescence those regions which exhibit this coloration desquamate abundantly.

2. In typhoid fever this phenomenon, being well defined and frequently observed, takes on a special significance and is of considerable diagnostic value.

Capacity of the Infantile Stomach. From actual measurements in eighty cadavers, Comby has determined that the physiologic capacity of the stomach at birth is 30 to 40 c.c.; at one month, 50 to 60 c.c.; second or third month, 80 to 100 c.c.; three to six months, 120 to 150 c.c.; six months to a year, 200 to 250 c.c.; one to two years, 300 to 350 c.c. Continued excess of food above these limits is certain to lead to dilatation, atony and autointoxication, a trio of morbid entities very common in bottle-fed babies.

The Cry of Hunger. Given a crying baby, the first question that arises is whether hunger is the source or not. Many mothers seem unable to think of any other cause, and often in consequence make matters worse by overfeeding. Dr. Philip F. Barbour (*Louisville Medical Monthly*) says that the cry of hunger is peculiar. "It is not always loud, but is nearly continuous, with the mouth quadrangular and the tongue flattened out and drawn back in the mouth in a peculiar manner, while the head is rolled from side to side." Sometimes the baby will cease crying and suck its fingers vigorously, and the cry is permanently ended by proper feeding. Very often what

the child needs is a drink of water instead of milk, and as a rule, we believe, particularly in summer, babies are given altogether too little pure water.

Can Typhoid Fever Be Aborted? There is an increasing tendency on the part of the medical profession to answer this question in the affirmative. In fact, not a few believe that a physician does not do his whole duty when called early to a case of enteric fever unless he jugulates the disease within a week or at the most a fortnight. The means chiefly relied upon for this happy consummation are restriction of diet, bathing or sponging, laxatives and intestinal antiseptics. Among laxatives calomel easily stands foremost. The Woodbridge treatment has many fervent admirers. Another new combination of remedies which is fast becoming popular is Viskolein. This preparation consists of a solution, capsules and tablets. The two former are composed of carbolized sulphoborate of zinc with thymol, menthol and kola, and are designed for hypodermic and oral administration respectively. The subcutaneous method is rather a novel feature in antiseptic medication and there is much to be said in its favor. The tablets are a phenyl-caffeine compound, combined with kola, thus preventing any untoward depressing effects that might otherwise follow. The remedy has given good results in the practice of a number of competent observers and is certainly worthy of a fair trial in all septicemic and infectious conditions.

American Academy of Railway Surgeons. The preliminary program of the fifth annual meeting of the American Academy of Railway Surgeons, to be held at the Auditorium, Chicago, Ill., Wednesday, Thursday and Friday, October 5, 6 and 7, 1898, is as follows:

First Session, Wednesday, Oct. 5th, at 10 a. m.

Executive Session—(Open to Fellows only)—Miscellaneous Business; Report of Editor.

Scientific Session—(Open to all those interested)—
“Anaesthesia,” R. H. Cowan, M.D., Assistant Chief Surgeon, N. & W. R. R., Radford, Va.; “Traumatic Injuries of Peripheral Nerves,” D. S. Fairchild, M.D., Surgeon, C. & N. W. R. R., Clinton, Iowa; “Injuries of the Genital Organs,” Milton Jay, M.D., Chief Surgeon, C. & E. I. R. R., Chicago, Ill.

Second Session, Wednesday, Oct. 5th, at 2:30 p. m.

Executive Session—(Open to Fellows only)—Reading of Minutes of Previous Session; Miscellaneous Business.

Scientific Session—(Open to all those interested)—
“The Radical Cure of Hernia,” W. J. Mayo, M.D., Surgeon, C. & N. W. R. R., Rochester, Minn.; “Concealed Meningeal Hemorrhage,” H. Reineking, M.D., Surgeon, C. & N. W. R. R., Sheboygan, Wis.; “The Interment of Ericson,” W. J. Galbraith, M.D., Omaha, Neb.

Third Session, Thursday, Oct. 6th, at 9:30 a. m.

Executive Session—(Open to Fellows only)—Reading of Minutes of Previous Session; Report of Secretary and Treasurer; Report of Standing Committees; Registration of Fellows and Payment of Dues; Consideration and Disposal of Applications for Fellowship; Miscellaneous Business.

Scientific Session—(Open to all those interested)—
“Physical Examination for Railway Service,” J. F. Prichard, M.D., District Surgeon, C. & N. W. R. R., Manitowoc, Wis.; “The Hygiene of Railway Injuries,” G. P. Conn., M.D., Chief Surgeon, C. & M. R. R., Concord, N. H.; “Conservatism in Railway Surgery,” H. Hatch, M.D., Surgeon, C., B. & Q. R. R., Quincy, Ill.

Fourth Session, Thursday, Oct. 6th, at 2:30 p. m.

Executive Session—(Open to Fellows only)—Reading of Minutes of Previous Session; Election of Officers; Selection Next Meeting Place; Miscellaneous Business.

Scientific Session—(Open to all those interested)—President's Address, "The Higher the Order of Railway Surgery the Greater the Protection to the Employe, the Passenger and the Company," R. Harvey Reed, M.D., Assistant Surgeon, U. P. R. R., Rock Springs, Wyo.; "Convenient First Dressing of Fractures, with Samples," E. H. Trickler, M.D., Surgeon, T. & O. C. R. R., Cutler, Ohio.

Fifth Session, Friday, Oct. 7th, at 9:30 a. m.

Executive Session—(Open to Fellows only)—Reading of Minutes; Miscellaneous Business.

Scientific Session—(Open to all those interested)—"Surgical Treatment of Some Varieties of Disease of the Prostate and Seminal Vesicles," G. E. Benninghoff, M.D., Surgeon, W. N. Y. & P. R. R., Bradford, Penn.

The following Fellows of the Academy have promised papers, but up to date have not furnished subjects for the same: A. D. Bevan, M.D., Chicago, Ill.; Allen Staples, M.D., Dubuque, Iowa; LeRoy Dibble, M.D., Kansas City, Mo.; C. K. Cole, M.D., Helena, Mont.; George W. Crile, M.D., Cleveland, Ohio.

Executive Session—(Open to Fellows only)—Reading Minutes of Previous Session; Miscellaneous Business; Introduction of President-Elect; Adjournment.

R. HARVEY REED, M.D., President,
Rock Springs, Wyo.

D. C. BRYANT, M.D., Secretary,
Omaha, Neb.

Higher Education in Ireland. The annual report recently issued by the president of the Queen's College, Belfast, (Rev. Thomas Hamilton, D.D.) shows that the number of students entering the college for the first time in the recent session was 113, being an increase of five upon the previous year. The number of students enrolled and in attendance in the various faculties during the session was as follows: Faculty of Arts, 135; Medicine, 223; Law, 23;

Engineering, 17. These figures all show an increase upon the previous year, with the exception of the numbers in the faculty of medicine, which show a decline of four. Fifteen female students attended the classes, ten of these being students of medicine. Since the college was opened to women, 40 women educated within its walls have taken degrees; 35 in art, 3 in medicine and 2 in law. Among the honors gained by the alumni of the college during the year, special mention is made of the winning of the junior fellowship in chemistry and experimental physics in the Royal University by Mr. Frederick G. Donnan, A.M. Since these valuable prizes were instituted, four years ago, four have been gained by the pupils of the Belfast Queen's College. The president also notes with great satisfaction that in connection with recent events in the Far East, honors have been conferred for public services upon two former students of the college—Mr. J. W. Leavy Brown, Her Majesty's Chief Commissioner of Customs in Corea, and Mr. J. Newell Jordan, Her Majesty's Charge d'Affaires at Seoul. The number of volumes added to the library during the year was 807; other publications, 146, making a total of 953. Of the gifts to the library during the year, special mention is made of the presentation of the MS. remains of the late Dr. Charles W. Dowall, some time professor of Greek in the college. The Museums have been well maintained throughout the year, and two anonymous donors have sent unsolicited subscriptions to aid in the foundation of a museum of sanitary science for the college. The Students' Union, opened in 1897, has proved a great success. There are 177 ordinary and 78 life members, and the proceedings of the year have left a balance to credit of £423s. 3d. The president concludes by pointing out how unsatisfactory is the present state of higher education in Ireland. He says that "this college and the higher education, not only of Ulster, but of the whole of Ireland, have suffered sadly by the changes

which have been introduced. * * * It is admitted, even by its enemies, that this college has done a great work for the country, and such is its inherent vitality and so strong its position that, notwithstanding the grave difficulties with which it has to contend, it is still doing work of which any college in the kindom might be proud. It only needs to be placed by the state on such a basis as in the estimation of all thinking men among us it ought to occupy, to rise in a generation or two to a most commanding position in the country.

* * * To anyone seriously anxious for the education and general prosperity of Ireland and cognisant of the evils of the present situation, as one called to deal practically with it from day to day as I am must be, the present position of affairs is wellnigh intolerable, and the statesman who will rid us of it will be entitled to the everlasting gratitude of the whole country."

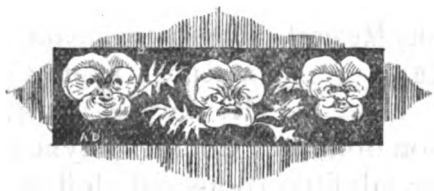
Lehmann's Medicinische Handatlaten. Saunder's Medical Book Publishers will issue in a short time the last of Lehmann's Medicinische Handatlaten. "For scientific accuracy, pictorial beauty, compactness and cheapness, these books surpass any similar volumes ever published. They contain reproductions from the most skillful artists, and their faithful portrayal of the subjects is assured by the eminent physicians and surgeons under whose direct supervision the plates were prepared." We believe that every word of the above statement is correct. The work has already been translated into nine different languages and is edited by leading American physicians.

Cornell University Medical College. This new medical college has received from Colonel Oliver H. Payne a gift of one and one-half million dollars. Colonel Payne formerly gave one hundred and fifty thousand dollars, but which, because of some technicalities, passed over to the medical department of the University of New York.

This enormous gift will place the Cornell University Medical Department at the head of medical schools in the East. It is indeed gratifying to know that men of wealth are beginning to recognize medical institutions. The College of Physicians and Surgeons in New York has, from time to time, received from three to five million dollars in the way of donations.

Pseudo-Appendicitis and Pseudo-Visceral Disease.

Intercostal neuralgia, as is well known, frequently simulates thoracic and visceral disease, and may even be accompanied by circumscribed tonic muscular contraction, which with the peripheral pain and tenderness, form a close clinical image to appendicitis. A ready and novel means of differentiating the functional from the organic disorder is described by Albert Abrams in the June number of the *Occidental Medical Times*. The method consists simply in congelation, by means of the rhigolene spray, of the tender spinous processes corresponding to the vertebral origin of the peripherally painful nerves. If the pain and tenderness are neuralgic in nature they will disappear as if by magic, together with the local intumescence, if present. The freezing process is of therapeutic as well as of diagnostic value, and the writer cites cases of fictitious dyspepsia, apparent renal calculus, pseudoangina pectoris, dysphagia and rigid pectoral muscle simulating tumor of the breast, cured by a few such treatments.



EDITORIAL ITEMS.

Baby Nursing in Japan.—Japanese mothers are wont to suckle their offspring for three or four years.

Convulsions in Nurslings.—These may be caused by alcoholism on the part of the mother or wet-nurse.

Varicocele.—Of 10,000 men examined in Illinois for volunteer service in the army, 25 per cent. had varicocele.

The Hysteroscope.—A German named Beuttner has perfected an instrument for direct inspection of the interior of the uterus.

Epistaxis.—Soaking the hands and feet in water as hot as can be borne will frequently cause prompt cessation of the bleeding.

The Growth of Tumors.—The sudden taking on of rapid growth in innocent neoplasms generally is good ground for suspecting malignant transformation.

Iodoform Poisoning.—The free local application of iodoform to wounds or mucous surfaces occasionally gives rise to erythema, considerable fever and even delirium.

A Rich Reward for a Cancer Cure.—By the will of the late Caroline Craft, a Boston lady, \$100,000 is set apart for the discovery of a cure for cancer or pulmonary tuberculosis.

Occupation Neuroses.—A moderate constant current of electricity applied locally for ten minutes every day is of service in the rapid restoration of function to the affected parts.

To Soften Plaster of Paris Splints.—Vinegar is recommended as a convenient agent for softening such splints, preparatory to cutting. It will also remove the plaster from the hands.

The Climate of Manila.—The average temperature is 80, and varies but little throughout the year. The rainfall is about 75 inches, over half of which takes place in July.

Bright Eyes.—The bright, glistening eye of strong emotion is the result of sympathetic distention of the lymph channels of the cornea and conjunctiva—a process analogous to blushing.

Four Plague Centers.—According to Robert Koch there are at present four great plague centers, namely, the German Hinterland of Western Africa, equatorial Africa, Tibet and Mecca.

Nervous Vomiting.—Meisl (quoted in *Pacific Record of Medicine and Surgery*) recommends a capsule (thrice daily) containing 1-10 grain of menthol with 10 grains of sodium bicarbonate.

Sycosis.—Barber's itch readily yields to frequent application of a $\frac{1}{2}$ to 1 per cent. aqueous solution of formaldehyde, says Dr. William V. Morgan in the *Medical and Surgical Monitor*.

Albuminuria of Infancy.—According to Rachford (*Archives of Pediatrics*) this condition in young children is very frequently the result of renal irritation by the poisonous products of lithemia.

Daily Change in Height.—It has been proved by actual measurement that an average man is about two inches longer when lying in bed mornings than in the evening, after being on his feet most of the day.

Silver Nitrate Stains.—These may be removed by treating with a solution of 2 per cent. of iodine and 3 per cent. of potassium iodide in water, followed in a few minutes with a 10 per cent. caustic soda solution.

Optic Neuritis.—This is the most valuable single symptom of brain tumors, either cerebral or cerebellar, being present in 90 per cent. of all cases. It is absent in functional affections, such as hysteria.

Ocular Neuralgia.—Markoff extols muriate of quinine in a 10 per cent. solution. He avers that a single instillation will often give relief, but the medicine may be repeated every fifteen minutes if need be.

Albumin Tests.—According to Buchner, the boiling test will show 1 part of albumin in 10,000; the nitric acid contact test, 1 in 50,000; the potassium ferrocyanide test, 8 per 100,000; the mercuric chloride test, 3 parts per 100,000 of urine.

A Great Physician Gone.—Dr. William Pepper, Philadelphia's distinguished citizen and physician, died in California, on July 28, of angina pectoris, at the age of nearly 55, after a life unsurpassed for busy benevolence and faithful, conscientious endeavor.

Diseases in the Philippines.—The most common disorders are dysentery, tuberculosis, bronchitis, syphilis and malaria. Fevers generally are most prevalent during the rainy season, from the beginning of July to the first of October. Beri-beri is endemic and claims many victims. Desquamative skin diseases are frequent in unacclimated residents. There are innumerable poisonous serpents, lizards, centipedes and other insects.

Lienteric Diarrhea of Achylia Gastrica.—For this distressing condition Allen A. Jones (*Journal American Medical Association*) has found hydrochloric acid very beneficial when administered after meals in the dose of 20 to 30 drops of the dilute acid. The dose may be repeated in an hour.

The Climates for Phthisis.—Solly divides phthisis for clinical purposes into three varieties. The first, or tuberculosis, does best as a rule in a cold, dry climate. The second, or catarrhal, is better off in a warm, dry climate. For the third, or pneumonic, a warm, moist climate is indicated.

New York State Association of Railway Surgeons.—The eighth annual meeting of the New York State Association of Railway Surgeons will be held at the Academy of Medicine, in New York City, November 17, 1898, under the presidency of Dr. C. B. Herrick, of Troy. Geo. Chaffee, Secretary.

Cancer of the Tongue.—Senn believes that lingual carcinoma is not excited so much by the irritation of the pipe itself as by the heat. He bases his opinion on the fact that Orientals, who smoke much through long-stemmed pipes, passing the smoke through water, are seldom afflicted with this malady.

Hematuria.—In renal calculus the amount of blood is small and the hemorrhage is increased by movement and diminished by rest in bed. Tumor hemorrhage is usually frequent and profuse, and is more common at night. Tubercular hematuria occurs at long intervals, is slight in amount and is not affected by exercise or rest.

Yellow Fever and Dengue.—Dr. H. A. West, of Galveston, who is well acquainted, from long experience, with both of these diseases, holds that the chief point of distinction in isolated cases is the acute nephritis commonly present in the former malady. In dengue, on the other hand, there is only a mild and evanescent albuminuria.

Overcrowding of the Professions.—That this condition is nothing new is shown by the following remark of Addison in the *Spectator* nearly two centuries ago: "I am troubled when I reflect how the profession of physic is overburdened with practitioners, and filled with multitudes of ingenious gentlemen who starve one another."

Congenital Stricture of the Rectum.—Dr. Charles G. Cumston asserts that when a single stricture is found between three and five centimeters from the anus, and presents the form of a diaphragm, with a central opening, the membrane being soft, depressible and irreducible by the finger, one may be certain that the stricture is congenital.

Mitral Stenosis and Early Death.—Sansom, says the *Clinical Review*, found the average age of death in 61 cases of this lesion to be 32.7 years; Hayden, in 42 cases, 37.8 years; Broadbent, in 53 cases, 33 years for males and 37 or 38 for females. Samways, studying the *post mortem* records for ten years at Guy's Hospital, found the average of death, males and females together, $38\frac{1}{3}$ years.

Ergot for Paresthesia.—In functional dysesthesias this drug has come into deserved prominence. In Dr. Spiller's clinic (*Philadelphia Polyclinic*) the fluid extract is administered in doses of 15 drops, three times daily for a week. It is then discontinued for a week, at the end of which time it is renewed for another week if the numbness and tingling persists. Three weeks usually suffice for a cure.

A Very Delicate Test for Bile Pigment.—Krokiewicz and Batko (quoted in *Post-Graduate*) use three reagents, namely, a 1 per cent. aqueous solution of sulphanilic acid, a 1 per cent. aqueous solution of sodium nitrite, and pure concentrated hydrochloric acid. If to a few drops of the first two solutions an equal quantity of urine is added and also one drop of the acid, in mixing a deep violet color results.

The Gross Medical College.—The Gross Medical College opened Tuesday, September 6th. The number of students present was probably the largest in the history of the institution. The president of the faculty opened the exercises and made a few remarks; there were also short addresses by Dr. Geo. E. Tyler, Dr. J. N. Hall and Dr. James M. Blaine, after which the Secretary made the usual announcements.

For Cholera Morbus.—Dr. N. S. Davis recommends the following formula: Carbolic acid, $7\frac{1}{2}$ grains; glycerine, 5 drachms; paregoric, 2 ounces; cinnamon water, $2\frac{1}{2}$ ounces. A teaspoonful of the fluid (for an adult) is administered *immediately* after each paroxysm of vomiting; until these cease to recur. Small frequent doses of calomel and mustard sinapisms over the epigastrium and spine are useful adjuvants.

The Urine in Typhoid Fever.—Robin (quoted in *New York Medical Journal*) claims that the following urinary characters, when observed together, are of service in the early diagnosis of this disease: A color of beef bouillon with greenish reflections; albumin in moderate quantity; disappearance of urohematin; absence of uroerythrin; presence of indican; augmentation of uric acid; notable diminution of earthy phosphates.

BOOKS.

Manual of Physical Diagnosis.—For the use of Students and Physicians. By James Tyson, M.D., Professor of Clinical Medicine in the University of Pennsylvania, and Physician to the University Hospital and to the Philadelphia Hospital. Third Edition, Revised and Enlarged, with Colored and Other Illustrations. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street, 1898. Twelvemo., 278 pages. Price, \$1.50.

This handy and thoroughly reliable little volume has been made even more servicable than formerly by a fuller exposition of the examination of the blood and gastric contents and by the addition of a short summary on the Roentgen ray in diagnosis. As we glance again over these familiar pages we can hardly conceive how the subject could be presented in fewer or better chosen words. The book is an unparalleled guide for students and a convenient companion for busy medical men in general.

Lectures on Tumors.—By John B. Hamilton, M.D., LL.D., Professor of Surgery, Rush Medical College and Chicago Polyclinic; Surgeon to the Presbyterian Hospital; Consulting Surgeon to St. Joseph's Hospital. Third Edition; 21 Illustrations. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. Twelvemo., 140 pages. Price, \$1.25 net.

This monograph embraces all the essential facts in relation to the pathology and clinical history of tumors. The author has followed the latest classification of the Royal College of Physicians and the American Medical Association. The lecture method adopted in the text has the great advantage of informality, bringing the student, as it were, nearer to the writer than would otherwise obtain. A number of illustrative cases are briefly described and pictured. The introduction and appendix include practical recipes for hardening and staining fluids, with directions for their use.

Laboratory Work in Physiological Chemistry.—By Frederick G. Novy. Sc.D., M.D., Junior Professor of Hygiene and Physiological Chemistry, University of Michigan. Second Edition, Revised and Enlarged. With Frontispiece and 24 Illustrations. Ann Arbor: George Wahr, Publisher, 1898. Price, \$2.00.

The twelve chapters of this book include accurate directions for the qualitative and quantitative analysis of the three great classes of food-stuffs and of the fluids and secretions of the human body. Nearly half of the text is taken up with the urine. In addition to tests and reactions, brief explanatory descriptions of the various

substances and their significance are interwoven with good effect. The tables for examination of the urine and the microscopic pictures of urinary sediment are good as far as they go. The tests for quantitative analysis of gastric juice are commendably simple and definite. As a practical laboratory manual Dr. Novy's work has no superiors.

Atlas and Epitome of Operative Surgery.—By Dr. Otto Zuckerkandl, Privat-Docent in the University of Vienna. Authorized translation from the German. Edited by J. Chalmers DaCosta, M.D., Clinical Professor of Surgery in Jefferson Medical College, Philadelphia; Surgeon to the Philadelphia Hospital, etc. With 24 Colored Plates and 217 Illustrations in the Text. Philadelphia: W. B. Saunders, 925 Walnut Street, 1898. Twelvemo., 395 pages. Price, \$3.00 net.

This volume is one of the most generally useful of the whole notable series of Saunders' Medical Hand Atlases. It treats of all the common and of many rare operations. The introductory section on division and reunion of tissues offers a good summary of this fundamental division of surgery. The colored plates, photographs and autotypes are of the highest excellence and show the actual appearances in amputations, ligations, abdominal operations, etc., in the most easy and natural manner possible. The accompanying text in its American translation is always lucid and to the point. The book is equally serviceable as a guide to operations upon cadavers and upon the living subject.

Handbook of Materia Medica for Trained Nurses.—Including Sections on Therapeutics and Toxicology and a Glossary of Terms, with Dose and Use of Each Drug. By John E. Graff, Ph.G., Apothecary in the Rhode Island Hospital, Providence. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street, 1898. Twelvemo., 235 pages. Price, \$1.25 net.

This tasteful little volume seems to strike a happy medium and to fill an actual hiatus. It tells about weights and measures, official crude drugs and solid and liquid preparations, and dosage. The lists of Latin and English names are conveniently arranged and annotated. The section on chemistry tells all that a nurse needs to know upon this subject and in a very clear and simple way. The section on therapeutics is commendably short; that on toxicology contains the sensible statement that "A physician is invariably to be sent for upon the discovery of a poisoned person." The glossary comprises a complete list of all the official drugs and their preparations and chemicals; English and Latin names and synonyms; part of plant used or chemical origin; and medicinal uses and doses. A physician may safely recommend this book to a nurse.

Electricity in the Diagnosis and Treatment of Diseases of the Nose, Throat and Ear.—With 161 Illustrations. By W. Scheppegegrell, A.M., M.D., ex-Vice-President American Laryngological, Rhinological and Otological Society; Vice-President Western Ophthalmologic and Otolaryngologic Association, etc., New Orleans, La. G. P. Putnam's Sons, 27 West Twenty-Third Street, New York, 1898.

This is the first systematic work ever published upon the subject. The author has obtained his literary material largely from late American and foreign journals, making in all 565 bibliographical references, and has rounded out this mass of information from the store of an extensive personal experience. In addition to a fair and full discussion of technique and of the relative merits of the various instruments and methods for applying electricity in the regions mentioned, quite a number of the thirty-seven chapters are devoted to the general principles of electricity, its uses and effects, and we think we have never seen the hard points in this connection more clearly elucidated. The work is very practical and comprehensive, and will prove of inestimable service to all practitioners who treat the nose, throat and ear.

A Manual of Modern Surgery, General and Operative.—By John Chalmers DaCosta, M.D., Clinical Professor of Surgery, Jefferson Medical College, Philadelphia; Surgnon to the Philadelphia Hospital, etc. With 386 Illustrations. Philadelphia: W. B. Saunders, 925 Walnut Street, 1898. Octavo., 911 pages. Net price, in cloth, \$4.00; half morocco, \$5.00.

The avowed purpose of the author in first publishing this book was to furnish a work which would stand between the complete, but cumbersome, text book and the incomplete, but concentrated, compend. That he has succeeded in providing that which was needed is evidenced by the demand for a second large edition within less than four years. The present volume conforms in general outline to its predecessor, but has been considerably enlarged and fully revised in accordance with the most modern advances in surgery. Among the new sections are those on the liver, gall-bladder, spleen, pancreas and female breasts. Injuries by electricity and the use of the Roentgen rays are fully described in separate chapters. A very timely section is that on wounds inflicted by modern projectiles. Among the newer operations described in full are Schede's thoracoplasty, use of the Murphy button, Bodine's colostomy, Senn's method for resection of the shoulder joint and Owen's operation for hare-lip. The work in its present form is very comprehensive and is admirably adapted to the needs both of medical students and general practitioners.

This work consists of fifty chapters, arranged in five parts. The first division, on "General principles," is a comprehensive

exposition of the physiological periods in the life of women, anti-septics and asepsis, pelvic diagnosis, local treatment, minor and major operations, with special chapters on drainage and after-treatment, and last, but not least, the relations of dress to the diseases of women. The second, and largest part, treats of inflammations, which are considered from a pathologic and etilogic standpoint rather than in the common regional method. The author's plan in this respect has many advantages, particularly as to the avoidance of reiteration and the presentation of pelvic affections in the combined forms which they ordinarily assume. In fact the trend of the argument throughout the book is to emphasize the functional unity of all the reproductive organs. In part three, tumors, tubal pregnancy and malformations are discussed and clearly differentiated. Part four is devoted to traumatisms, and includes the best chapter ever written on the subject of perineorrhapy. The final division of the work is on displacements, which are made plain to the dullest understanding by a large number of colored and uncolored diagrams. The last chapter of the book, on massage, strongly endorses the Brandt method, and clearly delineates its indications, contraindications and special modes of application in the various pelvic lesions. The author's descriptions of selected modern operations are direct and definite, and are well elucidated by a generous supply of first-class original drawings. The book in its entirety is worthy of all praise.



SELECTIONS.

In view of the fact that cod-liver oil in its crude, refined or emulsified form induces atony of the digestive organs, and hypertrophy of the gastric and intestinal mucous membranes, it is evident that the easily digestible and assimilable Hagee's Cordial, containing as it does the true active principles of the oil, is the most eligible succedaneum for this oil.

Chemical food is a mixture of phosphoric acid and phosphates, the value of which physicians seem to have lost sight of to some extent in the past few years. The Robinson-Pettet Co., to whose advertisement (on page 8) we refer our readers, have placed upon the market a much improved form of this compound, "Robinson's Phosphoric Elixir." Its superiority consists in its uniform composition and high degree of palatability.

Dr. Moritz Busch, who has been sometimes described as Bismarck's Boswell, and who enjoyed terms of special intimacy with the great Chancellor, is the author of an important paper on Bismarck and William I., which was published entire in *The Living Age* of September 3. It was written with a view to publication after Bismarck's death, and it contains so much that was communicated to the author by Bismarck himself that it is almost autobiographic.

Geo. W. Samuel, M.D., Nashville, Tenn., says: "I had a case of a man who had been drinking heavily for several days. I prescribed Celerina in tablespoonful doses every three hours, and in a short time he was in good shape again. I also used it in a case of neuralgia, in the following formula: \mathcal{R} —Celerina, 8 ounces; quinia sulph, 60 grains. \mathcal{M} . Sig. Teaspoonful every four hours. It acted like a charm. In a case of impotency I used calomel in connection with Celerina, and the patient reports everything standing all right."

Anti-Phymin.—The many forms of tubercular infection have had their share of so-called cures, which have sprung into existence only to find an early retirement because of their failure to secure specific results. Anti-Phymin contains the essential elements in the most potent combination, and has recorded more successes in the hands of scientific observers in the treatment of consumption, catarrh and diseases of the mucous membrane than any other remedy ever discovered. From sixty to ninety days' trial will convince the most skeptical.

Clinical Trials of the Action of Diuretin.—By Professor Gram, Copenhagen.—From very numerous trials the author concludes that Diuretin possesses a very powerful diuretic action, and that this is due to a direct influence on the kidneys. Diuretin is readily absorbed into the system and is wholly non-toxic, as only in one case was slight vertigo experienced. The ordinary daily dose is about 90 grains, which is given in single doses of 15 grains each. The quantity of urine is frequently increased by administration of Diuretin more than five fold.—*Therapeutische Monatshefte.*

Alimentation After Surgical Operations on the Digestive Tract.—Dr. J. P. Zum Busch, Physician-in-Chief at the German Hospital in London (*Die Heilkunde*), has recently called attention to the value of Lacto-Somatose in surgical practice, and especially after operations upon the gastro-intestinal canal. The cases in which he has employed this new product comprise chiefly herniotomies in adults and children, gastro-enterostomies, resections of the intestines, and operations for appendicitis. Although administered from the first day following the operation, Lacto-Somatose was always well tolerated, never producing nausea or vomiting, or exerting any constipating tendency; on the contrary, the preparation seemed to increase the appetite. The author also employed Lacto-Somatose during the convalescence from severe diseases, and in the intestinal affections of rachitic children, and observed that it exerted a beneficial influence upon the disease and at the same time promoted the nutrition of the patient. In view of his experience he is therefore inclined to recommend it as an easily digestible and well assimilated food product in all conditions of malnutrition.

Without considering the reasons for the great prevalence of vaginal, uterine and ovarian troubles, summed up in the phrase "Female Diseases," the fact cannot be denied that most American women are so afflicted, and every general practitioner, to say nothing of physicians who devote themselves to the treatment of these complaints, will bear witness to the truth of this statement. In general practice scarcely a day passes in which the physician is not consulted by nervous, hysterical or anaemic females, seeking relief for conditions superinduced by pelvic disorders. As a usual thing the direct cause is remote, and hence cannot readily be determined by the physician, who is, however, desirous of aiding the patient as promptly as possible. How to do this without surgical interference, and in the case of young girls without submitting them to digital examination, is the problem presented. We make no exaggerated claims when we state that the concurrent testimony of hundreds of physicians, many of wide experience in this class of ailments, goes

to demonstrate that in Ponca Compound (presented only in tablet form) the practitioner has a definite remedy of the most potent and beneficial character, which will produce satisfactory results in all cases amenable to internal treatment.

Food and Teeth.—George W. Williams, D.D.S., of Richmond, Ind., one of the leading dentists of that state and a popular writer on dental subjects, in a recent article says: "Many of the prepared foods sold for children are destitute of the qualities necessary to form sound and painless bones and teeth, and there is a great difference in growing up with fine grained, well glazed teeth in comparison with having the brittle, chalky teeth we commonly see. Diet is of the first importance in promoting the upbuilding of the bony system, and incidentally we would state that as a food for this purpose there is nothing that will equal 'Imperial Granum.' It is a pure, unsweetened food, made from the most nutritious portions of the finest growths of wheat. No derogatory word has ever been uttered by the medical or dental professions against 'Imperial Granum,' and its bone-building qualities. Perhaps the most important period in childhood is when the first set of teeth are erupting. It has been calculated that one child in ten has its life destroyed in consequence of diseases which have their origin at this time. Thus it is evident that children should be watchfully cared for, and I believe that besides those who die from diseases readily traced to irritation during the eruption of the first teeth, a number are the victims of diseases superinduced by general neglect of the mouth and the consequent tooth decay and improper mastication of food."

Medicine, a Progressive Science.—The Neurosis.—There is scarcely a writer of prominence today upon this subject who does not lay great stress upon the importance of early and prolonged treatment of the primary manifestations of an almost infinite variety of nervous affections with the view of preventing the constant development of still graver diseases. Neurosine is composed of only such drugs as are recognized by the profession as standard medicinal properties. In hysteria, epilepsy and neurasthenia it is unexcelled. Neurosine is presented in a most permanent and palatable form, an elegant and efficient combination of well known and long tried remedies, concerning whose virtues in the diseases and conditions indicated there is absolute unanimity of expression among all observers and authors upon the subject. The paroxysms of epilepsy is alleviated in the administration of Neurosine; a permanent relief is often obtained by its persistent use, but always where there are symptoms of neurosis, Neurosine should be administered in teaspoonful doses in a wineglass of water, three times a day so long as

such symptoms continue. In epilepsy double this dose should be given, and before the time the paroxysm is indicated the dose should be increased. Many severe cases of epilepsy have been relieved entirely by the persistent use of Neurosine alone. In all forms of female neurosis, Neurosine should be combined with Diviurnia.

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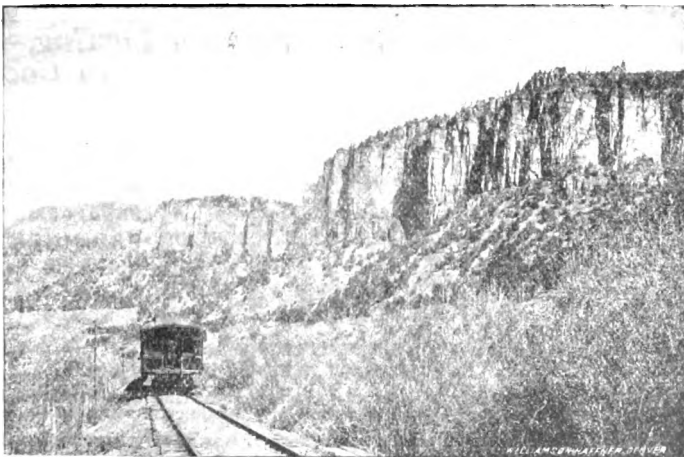
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Fig. XVII—Dorsal Position.

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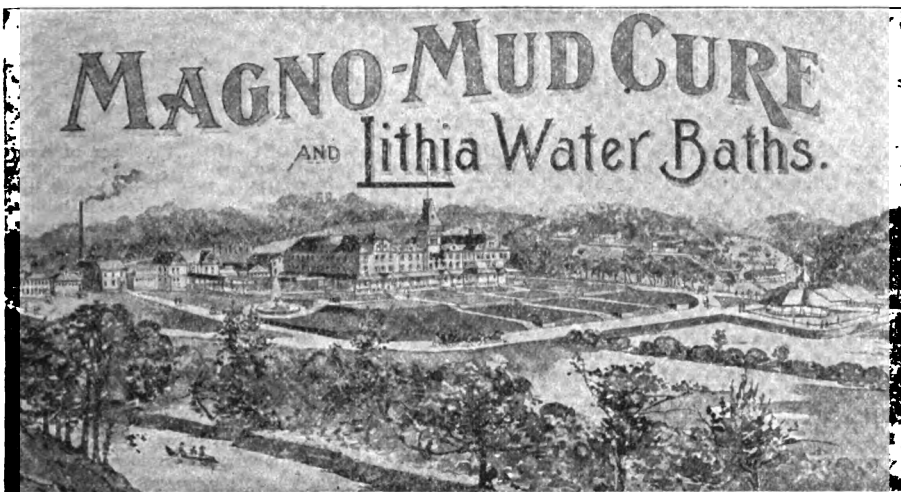
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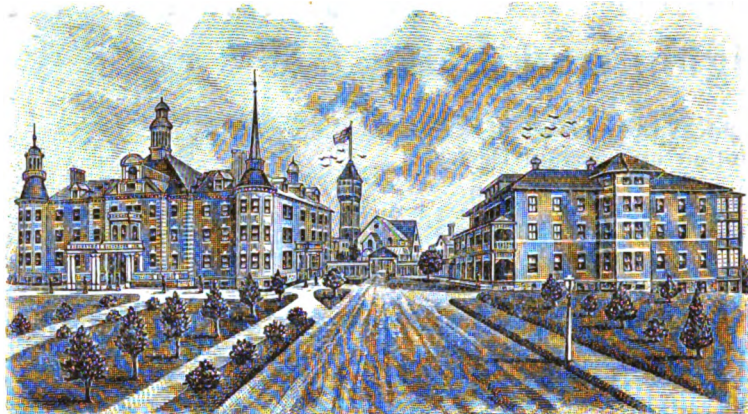
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ORIGINAL COMMUNICATIONS.

CLINICAL MEMORANDA UPON CANCER OF THE MALE GENITALIA.

By WM. P. MUNN, M.D.,
Denver, Colorado.

When one considers the frequency with which cancer affects the uterus and the infrequency of its occurrence upon the male genitalia, it hardly seems probable that cancer is a disease which can be directly transmitted. Literature contains a few instances of cancer of the penis occurring in men whose wives have previously died of the same disease affecting the uterus; but such reports are so rare as to be curiosities in literature. It has never been my fortune to observe such a case of supposed connubial infection.

Cancer of the prostate, the analogue of the uterus, is of rather rare occurrence, and ultimately always fatal. In fourteen cases submitted to operation because of prostatic hypertrophy, one was found to suffer from cancer of the prostate—these operative cases occurred in a series under surgical treatment which I roughly estimate in round numbers to have reached 100. Of those not operated, three were to my mind certainly cases of cancer of the prostate, and all died. This would show four per cent (4 per cent.) of cases of cancer among hypertrophied prostates sufficiently enlarged to seek surgical aid. The history of the four cases can hardly fail to be of interest.

Case I. H., aged 68 years, had suffered from occasional urinary hemorrhage for one year, when he came under observation in August, 1893. He required constant catheterization. The prostate felt through the rectum about the size of a walnut. In September, 1893, I performed perineal prostatotomy, cutting the prostate far enough to give a low-level opening into the urethra. He recovered promptly from operation, and for a few weeks improvement in urination was manifest. Then painful and difficult urination recurred more markedly than before, and hemorrhage was more frequent. The prostate did not seem harder than any other hypertrophied gland, but he began to lose

flesh rapidly. In November, 1893, I performed suprapubic cystotomy and removed piece-meal practically all of the prostate gland, which had enlarged in such a manner as to project like a cone with a hollow top, for a distance of an inch above the bladder floor. Microscopic examination of the removed fragments showed the growth to be an adeno-carcinoma. The patient died from exhaustion, five days after operation.

Case II. Was a young German, not quite 30 years of age; married, the father of two children. He came under observation in the spring of 1892. There was then present a large fistulous opening in the perineum through which he urinated. The edges of this were sloughing; the whole perineum was infiltrated with a growth of stony hardness, which involved not only the deep tissues, but the root of the penis, and was rapidly invading the scrotum. The perineal opening had been originally made by an operation for removal of calculus, but no formed calculus had been found, there being but a scaly calcareous deposit upon the infiltrated base of the bladder. This condition is commonly found in primary carcinoma of the prostate, and I have no doubt that the gland was carcinomatous at the time his first surgeon operated in the hope of removing a stone. The patient desired an operation of excision, but since the growth was so extensive that its removal would involve the dissection of everything between the sacrum and pubis I declined to operate. He lived three months thereafter. When the growth was removed post mortem, it was found to have involved the whole of the bladder, both testicles and cords, the skin of the scrotum and perineum, and the body of the penis; it was attached to the rami of both ischii and had begun to invade the rectum; both groins were invaded. It proved to be scirrhus carcinoma.

Case III. In the fall of 1893 an Englishman named Wesley, age 33, married, came under my care, having been previously operated by a most competent surgeon for the supposed removal of stone. In his case, also, there had proved to be only calcareous scales lining the base of the bladder. The perineal wound refused to heal, hemorrhages recurred from time to time and calcareous scales were discharged almost daily through the wound; the drainage tube would become incrustated within twenty-four hours. Examination revealed no calculus, but a fungating growth limited—so far as I could tell—to the lower part of the bladder. For the relief of this I proposed a combined suprapubic and perineal operation, which was declined because I could not assure a successful result. A month later this patient again called me, begging for the operation. The growth had increased very rapidly in size, being now quite palpable above the pubis as a mass about five inches in diameter. His general condition was so bad that it hardly seemed probable that he could survive the administration of an anesthetic. I

therefore declined to operate, and he died from exhaustion several weeks later. No post mortem examination could be obtained, nor was I ever successful in obtaining a shred sufficient in size for a proper microscopic examination. Nevertheless, from the clinical conditions, I have considered it to be a case of encephaloid cancer.

Fenwick has very properly emphasized the fact that many growths which superficially present the appearance of benign papillomata are in reality encephaloid cancers, bearing upon their surface a papillomatous fringe. This case I regard as coming under the category which Fenwick describes.

Case IV. S., aged 68 years, had suffered from enlarged prostate for three years, when, in the fall of 1892, a sudden exacerbation of symptoms caused him to come under my care. Occasional hemorrhages and complete retention were the cardinal clinical symptoms, not differing greatly from those of any ordinary case of prostatic enlargement with an inflammatory engorgement. There had supervened, however, with some rapidity an almost stony hardness of the gland, which I believe to have been carcinomatous. He declined any palliative operative interference and died after two months in great agony. No post mortem could be obtained, but I have no doubt in my own mind of the carcinomatous condition.

* * * * *

Cancer of the penis is a condition which I have never observed in any patient who had not been a sufferer from congenital phimosis. The continuous irritation resulting from such a condition may be a factor in causing the disease. In addition to the three cases herewith reported, I have had the opportunity of seeing three others in which the diagnosis of cancer of the penis had been made by other surgeons. In each instance the patient had been a sufferer from phimosis.

Case V. Admitted to County Hospital in March, 1892, suffering from an indurated sore on the prepuce, which has been there for one year. Previous good health. Age 50. No venereal history. No eruption and no glandular enlargement. Under observation for a week or more, the sore is observed to be hard and dry; something over half an inch in diameter and free from secretion; a small scab has formed upon it; the edge is infiltrated, but there seems to be no tendency to spread.

Diagnosis: Epithelioma of prepuce.

Operation, March 5, 1892, removal by free excision carried well down into the sheath of the penis. Rapid recovery and union of wound by primary intention. No evidences of syphilis after a month's observation. Discharged cured.

Case VI. Jackson, colored, age about 55 years. This man entered hospital about August 2, 1896. He gave a history of having suffered from phimosis from birth. Within the past

year he has acquired an ulcerative condition of the glans penis and of the prepuce. At this date the glans penis and prepuce have completely disappeared, and the body of the penis is invaded with a foul ulcerative growth; the glands in both groins are large and hard; the skin of the sheath of the penis is thickened and brawny and the skin of the supra-pubic region has begun to thicken.

Diagnosis: Epithelial cancer of the penis.

August 4, 1896, operation under chloroform. The skin over the pubis is widely excised attached to the penis and its sheath; the scrotum being split throughout its entire extent in the median line, the crura of the penis are detached from their attachment to the pelvis and hemorrhage being controlled by the cautery, the urethra is then severed an inch in front of the posterior angle of the perineal incision; the urethral stump was then button-holed through the perineum in front of the anal margin and sutured in place, the testicles removed and wound closely sutured. Then the inguinal glands were excised on both sides.

The urethra became rapidly attached in its new location and there was no difficulty in urination after the first three days. The scrotal wound united throughout. The inguinal wounds united kindly at first, but afterward broke down and ulcerated; the supra-pubic wound never healed, but progressed with apparently increased malignancy, ultimately effecting a junction with the ulceration that recurred in the groins. The patient died in October of exhaustion.

Case VII. G. T., German, prospector, age about 55. December 14, 1896, patient came to office to consult me as to condition of his penis.

History: Had phimosis from childhood. Has had syphilis and gonorrhea. Has been loose in his habits. Last fall contracted a sore beneath the prepuce and had venereal warts develop co-incidentally. Was treated by a physician, who recognized the warts only and treated them by cautery and other methods; finally the prepuce was slit partially and he was discharged with the assurance that he was practically well. The ulceration progressing he sought other aid and was treated by another physician, who tore loose the adhesions existing between the prepuce and the glans and removed some of the warts; also scraped out the ulcer. At this time was treated for syphilis by the administration of mercury and large doses of iodide of potassium. The ulceration continued and burrowed down between the sheath and the body of the penis; a fistula developed, which passed through the septum between the corpora cavernosa and spongiosum; the discharge continued foul.

Present Condition: There is a fistula on each side of the penis, passing down in the connective tissue of the sheath to

the pubis; there is a fistulous opening from the left side to the under surface of the penis; three small openings lead to small sinuses in the tissues of the prepuce. Discharge profuse and foul; ulceration present and progressive; a small sore on the glans has a horny layer of epithelium covering a reddish ulcer, which resembles an epithelioma.

Diagnosis: Serpiginous chancroid, with possibility of an epithelioma developing upon the glans as a result of the continued irritation.

After examination the patient went away, and did not return until December 28.

He now stated that he desired to put himself under my care. The condition was about the same as at the first examination, with the exception that the discharge was less profuse. The remnants of the prepuce were swollen and oedematous and ulcerated spots appeared at various points. The probe could be passed a distance of two and one-half inches into each sinus. A probe could be passed from under the surface of the penis between the urethra and the bodies of the corpora cavernosa; on the upper side the probe could be laid in a deep depression along the septum between these parts extending toward the root of the penis; pus could be squeezed out of the sinuses by pressure either on the dorsum of the penis close to the pubis or by pressure on the body of the penis from below through the tissues of the scrotum and as far back as the perineum. A clean-cut excavated sore existed at the upper right hand side and a similar one with sodden edges on the inner aspect of the lower lip of the remnant of the prepuce. Each of these were secreting continuously a thick, chancroidal pus.

Dressing was made in the following manner: The sinuses and ulcers were first freely irrigated with a solution of permanganate of potassium, then cleansed with hydrogen dioxide, and again irrigated freely with the permanganate solution, then carefully dried out with temporary gauze packing and finally packed with gauze covered with a mixture of aristol and stearate of zinc.

He was placed in hospital and the dressing as described above made twice daily. In a week there was marked improvement; the amount of secretion being very much decreased. In addition he was put upon internal treatment of protonuclein gr. 6 t.i.d. and a half ounce of glycerine extract of red bone marrow three times daily.

January 12, chloroform administered and the sinuses slit open to the bottom. On the left hand side at the bottom there was found an extensive cauliflower growth of venereal warts; on the right hand side the sinus was much deeper than it had appeared to be and a counter opening had to be made to facilitate drainage; the cavities were thoroughly curetted and in sev-

eral instances the cautery was applied to destroy all of the infected tissue. The sinuses were freely swabbed after curettment with a 1 in 100 solution of sublimate. Free bleeding on the right side necessitated the ligature of two vessels. The wound was packed with euophen and iodoform gauze.

Dressings were free from offense until the 14th, then pus manifested its presence.

January 18. Iodoform intoxication noted as a result of the use of iodoform gauze. Sterilized gauze substituted.

January 20. Redevelopment of venereal warts at bottom of left hand sinus; packing with tannic acid in order to destroy them. Dressings once a day.

January 25. Other local applications abandoned for the use of acetanilid and the compound stearate of zinc, mixed in equal portions by weight.

February 11. A small ulcerating point has developed on the glans, which tends to become covered with a horny epithelial layer; this detaches every few days, leaving an open ulcerating surface. The discharge from the deep sinus on the left side at the base of the penis is again offensive. Chloroform administered and curettment performed. The point of ulceration on the glans freely excised and the wound closed with a silk worm gut stitch.

February 13. Microscopic examination of the excised piece from the glans shows it to be characteristically epitheliomatous in nature. Examination of a bit of tissue from the depths of the left sinus also shows nests of epithelial tissue.

February 20. The dressings have been soaked with urine this morning. I had the patient pass urine in my presence. A very fine, tiny stream made its appearance from the floor of the urethra an inch back of the glans. An opening into the urethra has apparently been established by the progress of the ulcerative process. Examination to-day detects some slight enlargement of the inguinal glands in both groins.

February 23. On this date complete amputation of the penis was performed, followed by excision of the affected glands in both groins. The method of operation as follows: The scrotum freely split open in the median line and the perineum opened; the crura of the penis consecutively dissected out and detached from the ischio-pubic ramus; deep hemorrhage controlled by the Paquelin cautery; the urethra detached from the penis and cut off an inch beyond the posterior edge of the perineal wound; the perineum now punctured an inch in front of the anal margin and the stump of the urethra drawn through the opening and sutured to its edges in such a manner that the stream will be directed somewhat backward if the patient sits down to urinate. This being attended to, the body of the penis was then removed, the excision going far wide of the indurated

edges of the sheath near the pubic skin reflection. The glandular excision was difficult and accompanied with some hemorrhage. The testicles were not removed.

This patient had a prolonged convalescence, caused first by a fecal infection of the operation wound in the perineum and scrotum; and second, by a severe attack of sciatica, which I attributed to the prolonged traction upon the nerves by the posture rendered necessary during the last operation. He began to go out in May and recovered full use of his limbs by July. At the date of this writing, September, 1898, there has been no recurrence of cancerous growth anywhere; the inguinal scars are quite healthy; he has no difficulty in urinating; he weighs 230 pounds, has a ruddy complexion, and complains only of seminal emissions and erotic dreams.

"GRAINS OF EXPERIENCE" GLEANED FROM EYE AND EAR PRACTICE.*

By E. C. ELLETT, M.D.,

Ophthalmic and Aural Surgeon to St. Joseph's Hospital, the Children's Home and the Shelby County Poor and Insane Asylum, Memphis; Co-Editor of the *Memphis Lancet*;
formerly House Surgeon in St. Agnes' Hospital and the Will's Eye Hospital, Philadelphia.

Memphis, Tennessee.

It was my intention when I planned this paper to cover a good many of the points which arise almost daily in practice, but I found that to be sufficiently explicit on a few of the more important ones required so much time that I have limited the number of subjects materially. I am going to give only my own opinions and conclusions, based on such observations as I have had the opportunity of making, quoting from others of larger experience when necessary to establish my point.

With this by way of introduction, I will open my subject proper by a very brief allusion to a topic which is well worn, but none too well worn,

PURULENT OPHTHALMIA OF THE NEW BORN,

the so-called ophthalmia neonatorum. Since I addressed you three years ago at some length on this subject, my opinions have not changed. In the first place, this disease ought not to occur, and clean obstetrics and a drop of 2 per cent. nitrate of

*This paper, in its original form, was read before the Tri-State Medical Society of Missouri, Arkansas and Tennessee, December, 1897. Such additions and omissions have been made as were suggested by the discussion which it elicited.

silver solution will prevent it. I will not quote you any statistics from far-off Germany to prove this, but my own experience in the City Hospital here. About three years ago I was asked to see at that institution, in a very short space of time, several babies suffering from this disease, and at my suggestion the nurse and internes adopted the Credé method to which I alluded, that is, a drop of 2 per cent. nitrate of silver solution dropped in each eye after birth. The disease was banished. Some months later it reappeared, and after seeing several cases I inquired into the matter and found that it had been ordered to stop the prophylactic measure. I had it resumed and for nearly two years I have not seen anything there worse than an evanescent catarrhal conjunctivitis. Therefore I say from my own personal experience that this method of prevention is effective, for the large majority of the women delivered in that institution have a specific vaginitis. If the disease does develop it is necessary to keep the eyes washed out with a boracic acid solution every half hour or hour, according to the amount of discharge, and the everted lids should be painted once a day with a 2 per cent. solution of nitrate of silver. This is quite a well-tried plan of treatment, and leaves little to be desired.

A new remedy with which I have been favorably impressed in this disease is argonin. I have said in detail elsewhere what I have to say of this drug (*Memphis Medical Monthly*, November, 1897), and will only say here that I would prefer to use a 5 per cent. solution of argonin instead of nitrate of silver in any case which I could see twice a day. This solution can be given to the nurse or parent and used by instillation every three hours. I am well satisfied that it is efficient.

Another subject which I consider very important, and on which I have some very decided opinions, is the

USE OF A MYDRIATIC FOR TESTING REFRACTION,

In most persons under forty years of age and in many older ones. I might profitably consume all my time in a discussion of this subject, so great is its importance, but I will try to be brief.

I use the word mydriatic or "pupil dilator" in deference to custom; a cycloplegic or "accommodation paralyzer" is what I really mean, since the effect we seek with these drugs is paralysis of accommodation. The effect of these substances, of which atropia is the type, is, as you know, by paralyzing the focussing apparatus to render vision indistinct, and indeed impossible for near objects, for a length of time which varies from two days with homatropine to ten days with atropia.

It is argued against the use of a mydriatic:

First—It is unnecessary.

Second—It takes too much time.

Third—It may produce toxic symptoms or glaucoma.

In reply to these objections I will say:

(1) It is necessary in very many cases, for unless we resort to this aid, we have only the ophthalmoscope to stand between us and the opticians, and we can not expect much better results than they obtain. Refracting young people without a mydriatic is usually work in the dark, and yields about as accurate results as a physical examination of a person with all his clothes on, or examination of the urine by ocular inspection alone. In my own practice I have had innumerable demonstrations of the value of the mydriatic, and the more cases I see the more I am convinced of its utility. I will mention only a few recent cases which illustrate some of the benefits.

A lady came to me last summer who had been given up by an oculist as a case that glasses would not relieve. Under a mydriatic (which he had never even suggested) she was fitted at once with glasses which she now tells me are an "indispensable nuisance," that is, as much as she dislikes to wear glasses, she can not be comfortable without them. Another case of mixed astigmatism was sadly missed by a gentleman who does not favor the use of mydriatics, and from the same hands I saw a case with near-sighted astigmatism in one eye and far-sighted astigmatism in the other, easily discovered with the accommodation paralyzed, which, to judge by her former glasses, was not suspected without it. This lady, I may add, has become one of my most valuable friends, so much has she been relieved by proper glasses.

While writing this, two young ladies came to me wearing strong near-sighted astigmatic lenses fitted in one case by an unbeliever (an oculist) and in the other by a "refracting optician," when the trouble really was the opposite condition, that is, far-sighted astigmatism, in each case. Four years ago in a paper on "Spasm of the Accommodation," read before this society, I pointed out how this state of affairs is brought about, and in these cases it was impossible, without paralyzing the ciliary muscle, to arrive at a correct diagnosis. I recall now two patients who had been fitted, one with —S. 1.25 D., the other with —S. 2.50 D., and in neither was there any myopia at all after the ciliary muscle was paralyzed. It is true that many of the cases were thus mistreated by opticians, but some by physicians, and it is to guard against such errors that I am in favor of more extensive use of the mydriatics. I would like to put it this way to those who argue against this aid: "If you could, at will, instantly abolish the power of the ciliary muscle, test the refraction, and instantly restore the muscle to its functional activity, would you not do so in every young person?" (Savage.) If you say "Yes," then I refer you to my answers to objections two and three.

(2) They say it takes too much time. Who consumed most of my first patient's time, the one who had her wearing several pair of glasses, and coming often to her for changes, or the one who took, it is true, a couple of hours for his first examination, but has seen her only twice since, in three months? Then, people come to be relieved. They come, often, with reflex troubles, and by using homatropine properly, I can do conscientious work and keep them from their business but half a day. Is this too much time to take to relieve a man of a headache, which, may be, incapacitates him from business two days in a week, or an eye pain that so destroys his energy as to stand between him and success? My own experience tells me that the days I spent under the influence of a mydriatic were profitably though idly spent. If it is absolutely necessary for the patient to continue with the use of his eyes, he can do so, for you have only made him temporarily presbyopic, and a strong convex lens will enable him to read. I keep several such glasses to lend to my patients, and in addition I usually put a drop of eserine in the eye which hastens the recovery of the ciliary muscle. I prefer, however, that they do not use their eyes, but get the benefit of absolute rest for the two days.

(3) Any mydriatic may produce toxic symptoms or glaucoma. Yes, it may. I have seen toxic symptoms occasionally from atropia, but I think that many cases do not call for the use of atropia for refraction. In a very considerable number of cases I have seen toxic symptoms twice from homatropine, but not alarming in either case. I have seen symptoms more often than that from cocaine, but we do not, on that account, stop using cocaine. Occasional deaths occur from ether and chloroform, but that does not banish them from our armamentarium. Lately I have been using a combination of homatropine and cocaine,

after the formula Dr. Casey Wood, of Chicago,

one-fiftieth of a grain each, in gelatine discs, and these are slowly absorbed when put in the eye, quite effective, and so far I have noticed no unpleasant symptoms. The danger of causing glaucoma is very small, particularly if you instill a drop of eserine solution (a quarter of a grain to the ounce) in each eye after completing the test, and do not use a mydriatic in cases which present suspicious symptoms. As additional reasons for the use of the mydriatic, I want to say that the "shadow test," the only objective test of refraction that is of any value, is impossible with an undilated pupil. That eye strain is composed of two parts, strain of the ciliary muscle and strain of the extra-ocular muscles, and the association between these two is so intimate that we can only separate them and study each by itself after suspension of the function of the ciliary muscle by a mydriatic. That work done without a mydriatic, as I men-

tioned above, is not far removed in method or result from the work of the optician, and it behooves us to use this ready means at our command to convince a somewhat reluctant public that there is as much difference between oculists and opticians, as there is between physicians and counter-prescribing druggists.

Before leaving the subject allow me to say that I do not mean that no proper glasses are ever fitted without a mydriatic. I know they are, especially by one who is a skillful refractionist. In very many cases the manifest correction of a patient's hyperopia without attention to the astigmatism, unless it be as high as 1 D, will give relief from mild asthenopic symptoms such as blurring of type, burning, and slight frontal or ocular pain on using the eyes. But the patients who come to the oculist are more and more those on whom this plan of treatment has been tried, either by some colleague or by one of the numerous "eyes tested free" establishments, and a careful examination under a mydriatic will often reveal the inadequacy of any other sort of test. While the method of using the homatropine and cocaine discs as laid down by Dr. Wood is usually satisfactory, a respectable percentage of patients require a longer acting and stronger cycloplegic, such as hyoscyamine, duboisia, or atropia. The one who overlooks these indications, no matter how skillful he is, works in the dark. If he "hits," neither he or any one else can be sure that he has "hit," and if he "misses" it is because he has failed to make use of the means within his reach. He will "miss" oftener than he "hits."

STRABISMUS,

or "crossed eyes," is a subject concerning which we have much to learn. I have convinced myself that in young children it can usually be cured by glasses. In other children, that is, over twelve years of age, and adults, where the squinting eye has become (?) almost or quite blind, as they nearly all do in time, operation will be necessary, but should only be performed after a thorough examination under atropia. Tenotomy alone rarely suffices, but must usually be combined with advancement of the opposing muscle. I have seen a sufficient number of patients in whom divergence resulted from surgical treatment at an early age to make me very chary of operating for convergent strabismus on a child under twelve years old. There are exceptions to this, but not many.

Passing from the eye to its neighbor, the ear, there are one or two points in regard to

ACUTE INFLAMMATION OF THE MIDDLE EAR,

that I want to speak of, especially its frequency and its importance in children. Children are frequently treated for some obscure acute febrile illness till the appearance of a dis-

charge at the meatus and the disappearance of other symptoms tells the tale. I saw this happen last summer to an excellent practitioner, and Dr. Minor, of this city, called attention before the State Medical Society in 1894 to the occurrence of this complication in acute illness being mistaken for cerebral complications. McEwen Smith (*New York Medical Journal*, July 21, 1894) reports that he saw within three years six children with acute middle ear diseases unrecognized until just before death. In four a diagnosis of "brain fever" had been made, and in two "meningitis." They could all have been saved by proper care at an early period.*

Hartman, of Berlin (*Rev. Mensuelle des Maladies de l'Enfance*, August, 1895), quotes Kossel as finding otitis in eighty-five cases in autopsies on 108 infants one month old, and in thirty-eight of the eighty-five pus containing streptococci and pneumococci was present in the middle ear. He adds forty-seven autopsies of his own, with thirty-seven cases of otitis, twenty-eight of which were bilateral, and twenty-four of the thirty-seven died of broncho-pneumonia, showing a relation between the organism in the ear and the disease which caused death. The symptoms he puts down are restlessness, placing the hand to the ear, the cry and symptoms of meningitis. Especially in children suffering from acute intestinal disorders, measles, scarlatina, typhoid fever, pneumonia and influenza should the ears be watched. If it occurs, while it is very true that most cases get well of themselves, the same is equally true of all other acute diseases, and is no reason why they should be neglected. In every case of this sort, we should bear in mind the possibility of a chronic otorrhœa, mastoid and cerebral complications, and even death, since these occurrences are not so rare that we can afford to disregard them.

In the treatment of this condition, the various "drops," comprising nearly all known substances, and some unknown, are not only, according to my experience, useless, but positively injurious. I have in a few instances seen ear ache relieved by sweet oil and laudanum, but never by any other "drops." We must remember that most cases of acute otitis media are catarrhal, only a few being purulent from the first. Lannois (*Annales des Maladies de l'Oreille*, May, 1896) has found this secretion to be aseptic, and Pierce's experiments showed it to be feebly antiseptic, but if perforation occurs either by the processes of nature or by the intervention of the surgeon, what chance is there for this to remain a catarrhal inflammation, when the canal is full of rancid oil, and deposit from various vegetable preparations (tinctures, etc.)?

*To offset these, I will record the "honest confession" that I was recently called to see a comatose child, evidently dying, who had a discharge from the right ear, no mastoid symptoms, but symptoms of intra-cranial pressure (contracted flexor muscles, dilated pupils and choked disks). I trephined, expecting to find a temporo-sphenoidal abscess, but found tubercular meningitis, and of course the operation was of no avail.

I would advise briefly rest in bed, a brisk cathartic, an opiate, and heat—first dry heat, continuously, applied to the region of the ear, and moist heat as stated below, if this does not suffice, and if the pain is very severe, four leeches in front of the tragus. At this stage Politzerization may be gently done, but usually is best omitted, as it is painful and may drive septic material up from the pharynx. If drops must be used, 15 per cent. carbolic acid in glycerine is the least injurious, but syringing the ear with hot water (105 to 110 degrees F.) will do more good than any other local application. A quart of water at this temperature run into the ear from a fountain syringe every two or three hours, with dry heat applied in the interval, is more important than any other one item of the treatment, and should always be used if dry heat does not give prompt relief. If at the end of twenty-four hours, in spite of this treatment, and especially in spite of the syringing with hot water, the symptoms have not abated, the drum should be incised along the lower posterior border, to let the exuded fluid escape. This should be done with a clean knife, and with the canal thoroughly cleansed with a bichloride solution. When the opening is made, the fluid, usually bloody serum, may be taken up with sterile cotton swabs, and then a strip of iodoform gauze passed to the depths of the canal, and the hollow of the auricle filled with sterile cotton, held in by collodion applied at several points. The dressing may be removed daily, and the ear syringed gently with a warm bichloride solution, dried, and repacked.

If the case is left to nature and the drum perforated, the same attention to cleanliness, with the insufflation of a small quantity of an impalpable powder of boric acid, will in the large majority of cases, effect a cure. If neglected, they become

CHRONIC OTORRHOEA,

or "running ears," which are quite common, though less so than formerly, when their importance was not so thoroughly appreciated. In spite of the recent advocacy by some of gauze packing for this condition, I have, after trying it thoroughly, decided that in my hands better results follow the older method of treatment. That is, by syringing with a mild antiseptic solution (warmed), emptying the tympanum by inflation, drying the ear thoroughly and insufflating a small quantity of antiseptic powder. I have found acetanalid an excellent one for this purpose. An excellent home treatment is a solution of boracic acid in alcohol, but home treatment is vastly inferior to the personal attention of the surgeon. Granulations need curetting or cauterization, and, as a last resort, removal of the drum, malleus and incus may be practiced. My results from this operation have not been sufficiently brilliant to make me enthusiastic over it, and I certainly would not advise it simply because the "dis-

charge persisted after daily gauze packing for one month" (Pierce). It is, however, often necessary, and should not be withheld in those cases where caries of the ossicles can be demonstrated, or where the discharge persists after months of careful treatment.

A complication which may arise from acute or chronic middle ear suppuration is

MASTOID DISEASE,

or inflammation of the lining of the cavities of the mastoid process, a condition which has always seemed to me to present many points of analogy to appendicitis. If this is agreed to, then I think I need hardly add that, while spontaneous cure is sometimes seen, the best interests of the patient are often consulted by early radical operation. I do not mean to operate on every case of mastoid disease as soon as the diagnosis is made. The patient should be put to bed, closely watched and treated with local applications of cold, sedatives, and attention to the ear trouble. If the mastoid symptoms do not subside promptly, then I believe the operation of freely opening the mastoid cells and antrum is indicated.

I have done my first and last Wilde's incision.* That is, an incision through the skin and periosteum over the mastoid process, and it is as unsurgical as scarification of the abdomen would be in appendicitis, and fully as unsatisfactory from a therapeutic point of view.

I am told that Politzer, the father of modern otology, begins his course of lectures by showing a temporal bone, and remarking that this bone contains the organ of hearing, and is bounded by four sides. One of these sides is life, for by it we communicate with the outside world. The three other sides are death, for through these disease from the ear may attack the brain itself, one of its venous sinuses or the great vessels of the neck. It is surprising to think that an abscess situated in such a locality can find other means than radical and thorough evacuation suggested as a means of dealing with it.

I know that cases go to a point where pus formation has occurred or *seems to have*, and recover by absorption (?) or spontaneous evacuation, but these deserve to be classed as "anomalies and curiosities of medicine," and should, I think, have little weight in determining the conduct of a case of mastoid abscess.

The trouble in this disease is an extension by continuity from the middle ear cavity to the cavities in the mastoid pro-

*In this case I advocated the radical operation on account of mastoid pain and swelling, with bulging of the posterior wall of the external auditory canal, accompanying an acute otitis, and unrelieved by the measures outlined above. Though overruled in the consultation, and compelled to make the Wilde's incision, I had my opinion corroborated by the subsequent evacuation of the abscess into the digastric fossa, and I opened three different collections of pus under the sterno-mastoid muscle. I am convinced that the ultimate condition of this patient's ear would have been much better if the radical operation had been done. I will never make the Wilde's incision again.

cess, known as the mastoid cells and antrum. It is, in fact, an osteo-myelitis, spreading along the cavity of the bone. The distance from this cavity to the surface of the bone averages half an inch, and it is beyond my conception how incision of the soft parts down to the bone can have any good effect on a purulent inflammation in the cavity of the bone. When the pus has broken through and is under the periosteum, as occurs not rarely in children where the union of the sutures is not firm, an incision liberates the pus, but this is not Wilde's incision; and in these cases the operation should not be considered complete till the sinus in the bone is thoroughly opened and cleaned.

I have dealt rather fully with the matter, since there are many who from timidity or other reasons seek to avoid a proper radical operation by this make-shift method of treatment.

In support of this position, I beg to quote, in closing, the opinion of some other observers on this same point:

M. D. Lederman (*The Laryngoscope*, January, 1898—editorial): "Wilde's incision is obsolete and, at the present era, is not justifiable."

Frank S. Parsons (*Atlantic Medical Weekly*, September 24, 1898): "A word as to Wilde's incision, often used in these cases of mastoid disease, which consists of cutting down through the integument and periosteal layer behind the ear. If the pus has burrowed through to the periosteal covering such a procedure will relieve the pain and evacuate the abscess, but it can hardly be relied upon for more than palliative measures, or the first step towards further operative interference."

B. A. Randall, professor of otology in the University of Pennsylvania ("The Inefficacy of Wilde's Incision in Mastoid Empyema," *University Medical Magazine*, October, 1897): "Any assumption that real suppuration, still more caries, has been present in or on the mastoid and has been dissipated by treatment is negated by the actual experience of this and every other branch of surgery. It will require more than X-rays to demonstrate the presence of the caries or the pus which he imagines is there; although it must be freely conceded that the symptoms are strongly suggestive of such conditions. These are the cases for which the Wilde incision and other measures have been employed and urged as sovereign remedies; but clinical experience wholly fails to substantiate the claims of usual or great value. If pus be really present on the surface of the mastoid there is not one chance in twenty that it was formed there. In almost all cases it has burrowed out from the attic or antrum along the canal, or has found its way through the fistulous or cribriform mastoid cortex from the cells within. So it may be laid down as a rule that pus on or in the mastoid is the only indication for the Wilde incision. In nineteen out of twenty instances where this is the case, as before stated, the pus

comes from beyond the mastoid surface; and the section of the soft parts is but a step towards the evacuation and cure. If the knife be really needed, the chisel or spoon is required."

Chipault and Demoulin (*Annals of Ophthalmology and Otology*, October, 1895): "Wilde's incision is rarely indicated. In the majority of cases its employment is not reasonable because it does not attack the seat of the trouble, but merely relieves a symptom—pain."

Broca and Lubet-Barron (*Rev. des Sciences Med. en France et a l'etranger*, July 15, 1895) strongly denounce Wilde's incision, and believe it should be abandoned for more radical measures.

Howard Lilienthal (*New York Medical Journal*, June 1, 1895): "I have yet to learn a satisfactory reason for delay where there has recently been middle ear suppuration and where marked mastoid tenderness exists. The stake is a very heavy one, being nothing less than a human life; the risk of operation is comparatively slight."

Frank S. Milbury (*Medical Record*, November 13, 1897): "This is practically what is known as Wilde's incision. In the adult, experience has taught all operators that it is not advisable to stop here, as the cortex is too dense and non-permeable. It certainly is not wise to do this and delay to ascertain what further may develop, and subject the patient to a second anethetization and operation, when the whole work should have been completed at first."

THE RELATION OF DISEASES OF THE FEMALE GENERATIVE ORGANS TO NERVOUS AND MENTAL AFFECTIONS*

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The essayist stated that his attention has been arrested by several articles from the pens of prominent neurologists, which are contrary to the facts regarding the relation of the nervous system to diseases of the female pelvic organs in women, and that he attended the meeting of the American Medical Association at Denver, almost expressly to hear the discussion of this subject by the two sections of neurology and gynecology, which met by agreement for its discussion.

* Read at the Annual Meeting of the American Association of Obstetricians and Gynecologists, at Pittsburg, Sept. 21, 1898.

He was called upon to take the place of one of the absent members appointed to read a paper on the gynecic side. His lack of preparation and imperfect presentation of his views persuaded him to prepare the present paper, in which he says:

My consideration of the subject will be limited to the great neuroses of neurasthenia and hysteria, and insanity, and in order that I may not be misunderstood as to the premises from which I start, I will say that I am totally opposed to any operative procedure, except where pathologic conditions are demonstrable. I have no confidence in operations upon healthy organs for the cure of any neurotic condition, and believe that such are now generally condemned by the profession.

One of the distinguished neurologists at Denver stated that "The disorders of her pelvic organs have no more to do with her nervous and mental disease, than lesions elsewhere in her body; indeed, they have less to do with her psychoses and neuroses than most of her other organs."

Another in this same discussion declared that "All idea of curing neurasthenia or hysteria by operations upon the pelvic organs must be absolutely abandoned." And in another place he says: "The insanities are due to local organic disease. Facts are rapidly accumulating to show that the insanities are due to disease of the neuron, structural and functional, the result of various poisons circulating in the blood. Surely it would be just as sensible to claim a cure of insanity by trimming the toe-nails, as to claim a cure by pelvic operations." And this by one of the leading neurologists in this country.

I look upon the position taken by some of our colleagues in neurology, that there is no relation of cause and effect between the various neuroses and psychoses, and disease of the female pelvic organs, as being as extreme and condemnatory as would the advocacy of the removal of the normal organs in the female pelvis, for the cure of nervous diseases, by some ill advised persons calling themselves gynecologists.

In operating upon diseased conditions of the pelvis, we do not expect to remove the symptoms of the neuroses, but only those symptoms properly belonging to the pelvic disease itself, but strange and disappointing as it may be to some of our critics, when those pathologic pelvic conditions are removed or corrected, the nervous system relieved from the source of unceasing irritation, gradually returns to its normal poise, and the patient is cured of her neuroses as well as her pelvic disease.

Our neurologists are proclaiming the same doctrine as did Prof. Clifford Allbut in his Gulstonian lectures before the Royal College of Physicians in 1892 (but from which he has since recanted almost in toto), that there are a number of uterine and pelvic disorders, which are but the manifestations of neuroses. In point of fact, the statement needs to be made exactly the

reverse, and so frequently is this met with, in gynecological practice, that the gynecologist has become expert in their diagnosis and treatment. The fact of the matter is, that disease of the pelvic organs and affections of the nervous system are so frequently concomitant and interdependent, that the neurologist is, by far, less likely to give due and proper consideration to the pelvic troubles than the gynecologist to the neuroses, because of his lack of practice and natural repugnance to propose and pursue vaginal examinations upon the patients that come to him, whereas in the routine questions that form the history taken at every important case by the gynecologist, the neurotic and psychotic conditions present themselves and are given the consideration which their importance demands.

The study of and acquaintance with the great neuroses and psychoses is forced upon the gynecologist by the very nature of his study and treatment, whereas the patient going to the neurologist, does not expect and in most cases would refuse a pelvic examination at his hands. In point of fact, the neurologist sees but a small percentage of the operative cases, and their views on the whole subject are prejudiced by this exceptional class as well as by their imperfect and limited knowledge of the special department of the diseases of women.

I will venture to say there is not a prominent gynecologist but has seen numbers of women having diseased pelvic organs, and with pronounced nervous symptoms, who have come to him after having had the rest cure and various other treatments, and were restored to health by the cure of the pelvic lesions by operation. The position taken by many neurologists toward operations upon the sexual organs of women is unfortunate for this class of cases, and it is well to remind them that remarks prejudicial to operative treatment act as suggestion upon neurosthenic and hysterical patients, just as surely and detrimentally as does the unwarranted pelvic examinations at the hands of the gynecologist. Hodge has proven that neurasthenia results from a loss of substance of the nucleus and cell protoplasm, expressive of wear and tear, that is the invariable result of fatigue.

His experiments were made on animals and birds, and were conducted in a manner which left no doubt as to their accuracy. As a result of any continued reflex action, therefore, which denies to the neuron time for recuperation, we have produced a pathological condition which is seen in the shrinkage of the nucleus and cell substance, which robs the neuron of its functional ability to transmit the normal nerve influence and gives rise to the chronic fatigue symptoms of which all true neurasthenics complain, and these symptoms apply to every part of the system, muscular, the special senses, digestive, and derangement of the nutritive interchange.

The neurasthenic unit is a nerve force quantity. It may be a quantity in excess of the normal, or a quantity less than the normal. It may be nerve force out of balance, or nerve force delicately poised. It may be perverted nerve force. It may be nerve force overpowered by inhibition, or it may be controlled by a condition corresponding to a short circuited electric cell, in which all inhibitory power is lost. The protean manifestations of the neurasthenic state are accounted for, and only accounted for by a condition of varying values. The neuron's molecular relation to the electric cell has not been determined, neither has the nucleus and cell protoplasmic relation to the nerve force current been made out; but the neurasthenic condition doubtless travels in the direction of least resistance. Nervous demand has the power of attracting, in some way, nervous supply, but instead of the nerve centers supplying the demand with normal nerve force in a regular way, the centers supply a pathologic nerve force, or what amounts to the same thing, nerve force at irregular intervals.

With the conceded ground, that the pathological condition is brought about by the influence of a too unrelaxed subjection of the nerve cell and protoplasm to functional activity, let the source of this activity be what it may, then the source of this irritation must be corrected if the patient is to receive any permanent benefit.

If neurasthenia is the result of a change in the nerve cell, due to too great exercise of its functional activity, then disease of the pelvic organs furnishes the most frequent source of this irritation, and as the primal cause must be corrected if a cure is to be effected.

The rest cure, tonics and liberal diet may improve the condition of the neurasthenic suffering from pelvic disorder, but her condition becomes as bad and often worse than before, when she is removed from the favorable environment and is again subject to the care and labor of daily life. There is no time in a woman's life, from puberty to old age, that we do not have presented before us the intimate physiological relation between her generative organs, and several nervous systems, and through these to every organ and part of her body. The acne of adolescence is an example of the influence of these organs upon the skin. The reflex connection between the mammary gland and these organs, during the menstrual period, can only be accounted for through the nervous system, and by what other influences are we to account for the malaise, slight nausea, headache, disturbed vision, flashes of heat, constipation or diarrhoea, localized areas of hyperaesthesia, and mild forms of hallucination, all of which are sometimes and in some patients constantly present during the catamenia, making their appear-

ance with its onset, and subsiding and disappearing with its close.

The intimate connection of the cortex with the ovary is shown by the fact that cortical disease arrests menstruation. These physiological relations we are intimately acquainted with, and if present, physiologically, I wonder who is going to convince us that in the presence of pathological changes the influence of these organs upon the nervous system will not be more pronounced; as for example, the occurrence of various shades of optic neuritis and retinal irritation in connection with suppression or irregularity of the catamenia, slight epileptiform seizure of the facial muscles, laryngeal neuralgia, functional aphonia, tinnitus aurium and vertigo.

As a consequence of menstrual irregularities, we find painful irritation of the dorsal and lumbar spinal zones, functional irregularity of the cardiac rhythm, gastralgia, slight icteric attacks, irritation of the bladder with frequent micturition, varieties of headache, and severe hemicrania. All these symptoms can only be accounted for as reflex vaso-dilating or vaso-contracting phenomena, the result of irritation in the uterus or ovaries, arising from imperfectly performed physiological functions. We have all seen the acute disturbance of the menstrual function as a result of mental or physical shock, cold, heat, or great bodily fatigue. The spasmodic form of dysmenorrhea, which at one time largely occupied the attention of the profession, and which gave rise to as many forms of treatment as there were students of its phenomena, was readily explained and controlled after Dujardin-Beaumetz had shown that it was caused by anemic and toxic blood.

There is perfect truth in the claim of the neurologists, that ill health in women, is frequently the cause of her uterine troubles; but it is even more true that the various diseases of the uterus and its adnexa, are the exciting cause of the ill health that frequently makes its appearance throughout her whole system.

The exact knowledge that we have of the physiological action, compels a belief that these organs form the most prominent link in the chain of woman's health of both mind and body. It is unreasonable and unscientific to style a woman neurotic, hysterical, hypochondriacal, and treat her as such, ignoring the while, local diseases of her pelvic viscera, which aggravates and accentuates, and in most instances is the exciting cause of these neuroses; and apart from these direct results, there are those indirect evidences that follow upon interference with the secreting functions of the liver and kidneys, and with the metabolic action of the spleen. I reiterate that it is a blind injustice to deliberately and complacently ignore the influence of local disease as a causative agent of morbid changes in her

central nervous system. In those cases, where there are gross pathological changes, as for instance in those suffering with marked displacement of the uterus, with adhesion, extensive laceration of the perineum and cervix, the latter everted, completely eroded and ulcerated, edematous and tumefied ovaries with multiple fibroid growths in the uterine walls; in the opinion deliberately formed upon a basis of wide experience of the leading operators of the world, complete operation upon the universally diseased organs will invariably and promptly restore the patient to health and nervous equilibrium, and save her the expense and loss of time accompanying the rest treatment under the direction of the neurologist which in these cases is vain, grotesque and reprehensible. On the other hand, picture the case of an American woman, born and reared in the midst of luxurious surroundings, who marries at an age under twenty-two, bears four or five children within a period of six years and following the practice of the majority of American mothers, undertakes to supervise the physical care of her children, not willing to leave them to the mercy and consideration of a hireling, particularly during the night. At about the end of this time, the majority of these mothers become physically and mentally broken. They complain of weariness, nervousness, insomnia, inability to walk any great distance, constant bearing down feeling in the pelvis, headache, both occipital and frontal, backache, disagreeable dampness of the hands, irritable bladder, hyperesthesia, points of tenderness in both ovarian regions, dysmenorrhea, dyspepsia, bad dreams, constipation. With ordinary common sense, she attributes this tableau of symptoms to the strain of the rapidity of her child-bearing, and presents herself to the gynecologist. Upon examination, she has a slight tear in the cervix, slight rectocele and cystocele, relaxation of the ligamentous supports that permits of easy manipulation and displacement of the uterus. Both ovaries are sensitive to examination. This is a practical case for treatment at the hands of the neurologist. There may be those calling themselves gynecologists, who would magnify the importance of the local pelvic condition, and recommend the several plastic operations as a cure all. But it must be said that they are not representative of the intelligence of this department.

There is no condition under which one could say he was operating to cure either hysteria or neurasthenia. We operate only to cure pelvic disease, but often the cure of these neuroses follows.

I will venture to say there is no class of physicians who are more methodical, systematic, or thorough in the examinations of their patients; there is no specialty in which there is a greater mass of statistical records than ours, and this comes from the almost universal habit of keeping the history book;

and the market is full of innumerable varieties of them, a proof that they are demanded.

This book provides heads for family—personal—menstrual—marital—pain—functional, organic and nervous history, going into the history of every organ and the general circumstances, surroundings, and condition of the patient.

In an admirable paper from the pen of Dr. J. H. Etheridge (1) he says: "The declaration is hereby made that in a large number of cases in which perineal laceration and the neurasthenic state exist, they may occupy the relation of cause and effect," and follows with cases in detail supporting this declaration.

(1) *American Gynecological and Obstetrical Journal*, February, 1898.

In a discussion before this society last year, Dr. J. M. Duff detailed a number of cases supporting the ground taken in this paper. (1) The hysterical state is very largely self-propagated; that is to say, when hysteria causes a yawn or crying spell, the way is paved for the second yawn or crying spell to take place easier than did the first.

When the hysterical state travels in the direction of the involuntary functions, its production is more frequent, hence more damaging. Primarily this state is always the product of a weakened or non-resisting will, and is, therefore, a pure psychosis.

Hysteria and neurasthenia are often associated together, and when so related are difficult of division; as to just how much of the symptomatology is due to one or the other, is difficult to say.

It can be said that, whereas the symptoms of neurasthenia are seen most evident in the motor system, derangement of normal functions, and general somatic, those of hysteria are more pronouncedly psychical, with emotional outbreaks and loss of will power. When this disease affects the motor system, the evidence is pronounced, as in paralysis, tremor, phantom tumors, etc. But far more common than these, are the symptoms of anesthesia, and hyperesthesia; the latter often seen as inframammary tenderness, and what used to be called ovarian neuralgia.

(1) *Transactions of American Association of Obstetricians and Gynecologists*. Vol. X., page 218.

My friend, Professor F. X. Durcum, has for a long time shown by ingenious bimanual palpation, that this pain in the majority of hysterical women is a superficial inguinal hyperesthesia.

The cautious care exercised by my celebrated master, Professor Charcot, in approaching every case of hysteria, has given me an exaggerated respect for this disease, and experience has

taught me to be exceedingly guarded in my prognosis, as to benefit that may follow operation in its presence.

Unlike neurasthenia, no fixed morphological pathology has been discovered for this affection, and we are totally unacquainted with its etiology. We know that it has a tendency to run in families, and that it is cured by all sorts and manner of treatment.

Professor Charcot had great hopes for the usefulness of hypnotism in its treatment. We know it is most frequently met with in those of a neurotic diathesis, and in consequence, continued nerve irritation from any source is liable to start it into activity.

It is frequently seen in connection with disease of the pelvic organs, yet it often persists after the pelvic disease is cured. On the other hand, pelvic operations have often cured a patient of hysteria, but innumerable other treatments have cured it also.

Dr. S. G. Webber, of Boston, related a case to me of a woman bedridden for six years, who was suddenly cured by self-suggestion following prayer by her minister. During her confinement she had presented many of the graver manifestations, including paralysis.

No stronger evidence of a pure psychosis could be asked than this. Let us now go on to the consideration of insanity. Insanity is an abnormal condition of the mental faculties, and may be due to defective development, acquired disease, or mental decay.

Two theories may be offered why inflammatory disease of the uterus and its adnexa are potent etiological factors in exciting alienation in females: The reflex theory, and the internal secretion theory. The innervation of all the pelvic organs is supplied chiefly by the inferior hypogastric plexus, possibly the most important of all the nerve plexuses, controlling as it does the delicate and complex organic mechanism charged with the reproduction of the human species. The constant irritation of these lower nerve centers incidental to local disease, must react upon the higher centers, begetting in some the delusional manifestations which determine mental alienation.

In the recent physiological theory of internal secretion, we may find the true solution of the deleterious effects that diseased sexual organs exercise upon the distant nerve centers. Some physiologists claim "There is a normal and constant contribution of specific material by the reproductive glands to the blood or lymph and then to the whole body." (1) If the secretion theory is worthy of consideration, and I think it is, and these glands give off elements necessary to the economic equilibrium, it is possible that in the presence of diseased (1) (American Text Book Physiology, edition 1896, page 901, and Annals

of Gynecology and Pediatrics, November, 1897, page 81.) conditions, they may give off vitiated elements that act as toxins, and the implantation of pathologic conditions upon these organs must in no usual degree disturb the mental equilibrium, especially in those predisposed to mental weakness.

Jacobs, of Brussels, in conversation with Laphorn Smith, of Montreal, said he gave powdered cow's ovaries to his patients suffering with nervous troubles from induced menopause, and that he had cured several cases of insanity with this remedy. This is very strong evidence that the ovaries do secrete elements to the system essential to its equipoise.

Kraft-Ebing divides insanity into two great groups: disorders of the developed brain, and those due to arrest of brain development. The last comprise idiocy and cretinism, which are incurable and therefore do not enter into this consideration of the subject. The other affections, as melancholia, mania, acute delirium, periodic insanity, moral insanity, hypochondria, hallucinations, hysteria, all belong to the developed brain.

Huxley says that in all intellectual operations, we have to distinguish two sets of successive changes, one in the physical basis of consciousness, and the other in consciousness itself. As it is very necessary to keep up a clear distinction between those two processes, he says let one be called *neurosis* and the other *psychosis*. It is in the clear light of this definition that I make use of the word "Psychosis."

In our consideration of hysteria as a psychosis in which the predisposition may be brought into active manifestation by a multitude of *point depart* from which must not be eliminated diseases of the pelvic organs as an exciting cause, so must these diseases be given due consideration in the etiology and treatment of various forms of insanity; and the clinical facts that are appearing from time to time, following the work of the gynecologist upon the insane, are rapidly assuming the proportions of statistics which demand and can not fail of careful and intelligent consideration by both the profession and the laity, the results of which will be that at no distant day the gynecologist will be a regularly appointed officer attached to all of our asylums.

Dr. A. T. Hobbs, assistant physician to the Ontario Asylum for the Insane, in a recent paper (1) states that upon examination of seven hundred and fifty females in the asylum, one-sixth of them were found to be suffering from diseases of the pelvic organs.

He gives in detail the surgical treatment of thirty-two cases of general surgery, in none of whom resulted any mental improvement. He then says with reference to the gynecic cases, "The following observations apply to one hundred and ten cases

comprising the number operated upon, exclusive of a number of cases too recent to be presented in this report."

It appears that these operations cover a period of over two years. Thirty-six per cent. were completely restored mentally, 29 per cent. showed an improved mental status. In 29 per cent. the mental condition remained stationary and 3 per cent. died. He gives details of the diseased conditions and operations performed, and in analyzing the results notes that the improved mental conditions followed the relief of a certain class of utero-ovarian disease of inflammatory origin.

In closing he says: "I must emphatically state, however, that many of those who recovered their reason would not have done so without surgical interference. The almost instantaneous resolution of the mental faculties in some, and the steady evolution of the normal cerebral functions in others, can not but afford incontrovertible evidence in support of the relation of physical cause and mental effect."

Replying to a letter of inquiry, Dr. T. K. Holmes, of Chatham, Ontario, writes:

"My experience with nervous affections due to pelvic disorders is gathered from private practice entirely, and embraces thirty-one cases. Twenty-eight were puerperal mania, and three cases of melancholia." (All of which are mentally cured by operation.)

In answer to my request, Dr. T. J. W. Burgess, superintendent of the Protestant Hospital for the Insane at Montreal, has furnished me with the details of three cases of insanity. (All cured by operation.)

Although there are some neurologists of note who are opposed to all gynecic theories of nervous disease, there are others of equal reputation who consent that they are correlated.

In a discussion at the College of Physicians, Philadelphia, on "The Relation of Nervous Diseases in Women to Pelvic Diseases," Dr. Weir Mitchell said: "Insanities of various types in women occur, in which the menstrual period is sometimes the original and sometimes the determinative cause of the mental disease."

The writer follows with statistics and details at length.

REPORT OF AN INTERESTING CASE.

By M. BESHORE, M.D.,

Trinidad, Colorado.

August 31, 1898, I attended Luciana Valdez, of this city, when she gave birth to a living boy and discharged what seemed to be a perfect placenta with cord. The abdomen (the walls of which were very thick) seemed uncommonly large, but no menacing symptoms appearing I let her alone.

Eight days later (September 8) I delivered her of a dead boy—a mass that seemed to be the entire placenta, minus cord, preceding the fetus, which had considerable length of cord attached.

Eighty-three days later (November 30) I removed what seemed to be an entire placenta, with apparently about six inches of cord attached.

After the first birth she remained in bed till a week after the second. She then did her house work till the day of the removal of the last placental mass, when she took her bed two days, since which she has had usual health and one new boy.

Her age was thirty-four years; had had three previous natural confinements, the first at the age of fourteen years and four months.



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EDITORIAL DEPARTMENT.

Snakes and Snake Bites. Dr. B. Merrill Ricketts concludes a careful scientific article on "Serpents and Their Venom" (*Cincinnati Lancet-Clinic*, Sept. 3d) with the following observations: "The copperhead, coral and rattlesnake are the only serpents in the United States which possess fangs, at the base of which is a sack containing a poisonous fluid. The result of inoculation depends upon the dose and size of human being or animal. Most of the authentic cases of death by these serpents have been among children. No authentic death, as the result of the bite of either one of these snakes, has been found in the adult man by myself. If death does not result within a few hours, it is not the venom but other agencies that produce it. Over-stimulation from alcohol and other agencies is, I believe, oftener the cause of death than virus inocula-

lation. The effect upon the body is more severe if the virus should be injected into blood vessels. There seems to be no subject which is surrounded by so much uncertainty and exaggeration." By way of treatment, the writer recommends the local injection of potassium permanganate or of a 1-100 per cent. solution chromic acid; also nitrate of strychnine, hypodermically, until coma is overcome or the physiologic effects of the drug produced.

Relative Frequency of Skin Disorders. At the recent annual meeting of the American Dermatological Association, President Hyde stated (*Journal Cutaneous and Genito-Urinary Diseases*, September) that of 300,000 examined and treated for skin diseases by members of the association during the past twenty-one years, 84,000 were treated for eczema, over 33,000 for syphilis, more than 25,000 for acne, about 10,000 for the several varieties of pediculosis, and more than 10,000 for the diseases produced by the vegetable parasites. There were 9,000 cases of psoriasis, 3,000 of zoster, over 7,000 of the several forms of impetigo, nearly 900 of urticaria, between 1,000 and 2,000 cases each of lupus erythematosus and lupus vulgaris, more than 8,000 of alopecia in its various manifestations, over 6,000 of all the forms of dermatitis, more than 1,700 of carcinoma, and 600 of pityriasis maculata et circinata. Of the rarer dermatoses, there were but three cases of cutaneous actinomycosis, two of equinia, nine of rhinoscleroma, four of progressive melanoderma lenticularis, four of myoma, and two of sclerema neonatorum.

Intestinal Hemorrhage During Typhoid Fever. Dr. S. Solis-Cohen (*Philadelphia Polyclinic*, Aug. 27) advises the following line of treatment: Fluids to be diminished to not more than an ounce at a time, not oftener than every two hours for several days. Expressed juice of beef, freshly

prepared, the sole food. Morphine, by the skin, in sufficient doses to keep bowels quiet and patient at rest. Continuous application of the abdominal ice-bag over the right iliac fossa. Heat to the lower extremities. A small hypodermic injection of strychnine or camphorated oil, not to be repeated unless clearly necessary, if symptoms of collapse, great weakness of pulse or excessive fall of temperature seems to call for temporary stimulation. Washing the stomach with physiologic salt solution in the recumbent posture in case of hiccough, distressing nausea or vomiting.

Western Surgical and Gynecological Association. The eighth annual meeting of the Western Surgical and Gynecological Association will be held at Omaha, Dec. 28 and 29, 1898. Titles of papers from some of the leading surgeons of the West are already in the hands of the secretary, and the coming meeting promises to be the most interesting yet held. The local committee of arrangements at Omaha is actively preparing for the entertainment and comfort of those who attend. Surgeons and gynecologists, and those interested in the progress of these specialties, are cordially invited to affiliate themselves with us. The secretary will be glad to send application blanks. Titles of papers should be sent to the secretary as soon as possible, but not later than November 20, to insure a place on the program.

GEO. H. SIMMONS, Secretary,
D. S. FAIRCHILD, President, Lincoln, Neb.
Clinton, Iowa.

Splenic Extract in Mental Disease. Dr. Charles A. Bois and Neil T. Kerr, of the Lanark County Asylum, having experimented for some weeks with this treatment on twenty-two inmates (*British Medical Journal*, Sept. 10th) conclude that the most general result is physical improvement. Its favorable action on the mental state they found evident in a fair

proportion of cases, especially of adolescents, either directly or through improved physical conditions. It is of material service as an adjuvant to thyroid treatment. The writers prefer capsules of the liquid extract, each containing 20 grains of fresh spleen, to be taken at least half an hour before meals.

Prevention of Sore Nipples. J. Milton Mabbott (*New York Medical Journal*, Sept.

10th) has been unusually successful in preventing mastitis among his patients by a course of preliminary treatment for four to six weeks before delivery, consisting simply in the use of lanolin and a soft well soaked nail brush. A small piece of the ointment is well kneaded into the nipples each night, and on the following morning is removed by means of a thorough scrubbing with brush and pure soap.

The Differential Diagnosis of Cystitis and Pyelitis. George Rosenfeld (quoted in *Philadelphia Medical Journal*) lays down the follow-

ing axioms: 1. An alkaline reaction is not found with uncomplicated pyelitis. 2. The limit of albumin in the urine, even with the severest cystitis, is .15 per cent. 3. If nearly all the pus corpuscles are crenated, the condition is pyelitis. 4. If the red corpuscles present are chemically or morphologically decomposed, provided the hemorrhage is only microscopic and there is no vesical tumor, pyelitis usually exists. 5. The characteristic symptom for diagnosis is the albumin-content, which is from two to two and a half or even three times greater with pyelitis than with cystitis.

"Growing Pains." Bennie, in the *Archives of Pediatrics*, denies the separate existence of any such malady. The common causes of pain which have been classed under this heading are myalgia from fatigue, rheumatism, diseases of the bones and joints of the lower extremities, and fevers. The first and most

frequent variety is felt about the knees and ankles after unusual exertion. It is promptly relieved by elevating the limbs and rubbing toward the heart with the palm of the hand. Rheumatism is also a common cause, and as in children the pain in the joints is slight and there is little or no swelling and very mild fever, the disease is often overlooked, although particularly liable at this age to give rise to endocarditis. To the third class mistaken by the laity for growing pains belong many cases of hip joint disease and epiphysitis.

Relation of Hysteria and Neurasthenia to Pelvic Disease.

In concluding an able article on this subject in the

American Gynecological and Obstetrical Journal, Der-cum asserts that there is no necessary relation between these great neuroses and pelvic disease, even though the two affections often happen to coexist. Pelvic symptoms are merely recognized more readily by a neurasthenic patient, because in neurasthenia there is increased reaction to local impressions, nervous weakness and nervous irritability going hand in hand. In hysteria the patient is exceedingly impressionable and easily accepts the suggestion or autosuggestion of pelvic disease, especially as inguinodynia is so common a symptom of the hysterical state. The pain areas of hysteria bear no relation to disease of the deeper structures. The writer concludes that nervous symptoms directly due to pelvic disease are comparatively rare, and are mostly local, and these alone have any surgical significance.

Movable Kidney. Einhorn (quoted in *Philadelphia Medical Journal*) states that the following symptoms are frequently present: A feeling of traction and weight in the abdomen; epigastric palpitation; frequent urination, sometimes with slight burning; pains in the sacral region after slight exertion. The symptoms are more pronounced on standing or sitting

and disappear on lying down. Menstruation aggravates, while pregnancy lessens discomforts from this cause. The writer believes the abdominal bandage and dietetic measures form the best method of treatment.

Colorado State Medical Society. We are just in receipt of the official report of the last regular business meeting of this society, held on June 6, 1898. We congratulate President Campbell on the fact that he was able to make up his committees without the necessity of putting any one doctor on two or more committees, or as has happened with some presidents, finding it necessary to put some particular physician on every committee. Some of the presidents have seen fit to leave some one or perhaps two physicians, for some personal or other good reason, off of all the committees. Dr. Campbell is to be especially congratulated on the selection of the various chairmen of the committees, especially on the appointment of Dr. W. A. Jayne as chairman on the Committee on Legislation. We were able two years ago to get a bill through the House and have it called up for its third reading in the Senate. It is to be hoped that Dr. Jayne will at least get it to the Governor for his signature, even though he veto the bill.

Untoward Effects of Drugs. Under this caption, Butler, in his newly revised text book on materia medica, gives a rational account and tabulated summary of the various subtoxic non-accumulative symptoms commonly ascribed to idiosyncrasies. All these, he says, can readily be ranged under a few general laws. An antipyretic, for example, may cause skin eruptions because it is excreted through the skin, which also through its pores regulates temperature and is under control of the thermotaxic centers. For the same reason profuse, debilitating perspiration is often observed. And since control of temperature cannot be effected without affecting the vasomotor system

of blood supply, heart failure, collapse and palpitation may result. If the thermoinhibitory centers be too much stimulated they may lose control—become paralyzed as it were—and hence it happens that in certain neurotic individuals an antipyretic may actually raise the temperature. If the antipyretic is excreted through the kidney, slight albuminuria is very apt to make its appearance.

So-called tonics are likely to produce temporary delirium, blindness and deafness, through cerebral vasomotor disturbance. Alteratives and purgatives may excite hemorrhages from mucous membranes and swelling of those of the eye and nose in addition to skin eruptions. Astringents sometimes cause diarrhea, even melena. Hypnotics, through their action on the central nervous system, may produce excessive perspiration, skin eruptions, vertigo and collapse. Diaphoretics may excite pain at certain points from local over-stimulation: pilocarpine, for instance, in the head of the penis.

Mississippi Valley Medical Association. Nashville, Tenn., October 14, 1898.—The annual meeting of society closed today, after a very interesting session. The attendance, while not so large as usual, included many of the representative men of the Central-South, and papers were read by distinguished men of the profession from Chicago, New York, Cincinnati, St. Louis and Brooklyn. The address on "Medicine," by Dr. Whittaker, of Cincinnati, was an able production and elicited universal commendation.

Through a resolution, introduced by Dr. Arch Dixon, this society placed its condemnation upon the unethical and unprofessional conduct of Prof. Behring in taking advantage of the lax patent laws of the United States, and recommended that all members of the association renounce the Behring Serum.

The entertainments were of a high order, indicative of Southern hospitality. Dr. Duncan Eve, the chairman of the committee of arrangements, fulfilled his duties to the eminent satisfaction of all, and his election to the presidency was a fitting tribute to his untiring energies toward making the meeting a success.

The Nominating Committee brought in the following report, which was unanimously adopted:

President, Dr. Duncan Eve, Nashville.

First Vice-President, Dr. A. J. Oschner, Chicago.

Second Vice-President, Dr. J. C. Morfit, St. Louis.

Secretary, Dr. H. E. Tuley, Louisville.

Treasurer, Dr. Dudley Reynolds, Louisville.

Chairman Committee Arrangements, Dr. Harold Moyer, Chicago.

Next meeting in Chicago.

The Bureau of the Medical Press was a prominent feature of the Exhibit Hall, occupying the Speaker's Rostrum in the center of the Senate Chamber. The following medical magazines were represented:

Philadelphia Medical Journal.

International Journal of Surgery.

American Journal Gynecology and Obstetrics.

Medical Review of Reviews.

Journal of Cutaneous and G. U. Diseases.

National Medical Review.

Hot Springs Medical Journal.

Memphis Lancet.

Chicago Clinic.

New Orleans Medical and Surgical Journal.

DENVER MEDICAL TIMES.

Kansas City Medical and Surgical Journal.

New York Post-Graduate Journal.

Medical and Surgical Bulletin, Nashville.

Southern Practitioner, Nashville.

Medical Fortnightly.

St. Joseph Medical Herald.

American Medical Journalist.

—F.

Some Observations on Brain (Abstract.) Dr. William C. **Anatomy and Brain Tumors.** Krauss, of Buffalo, read a paper at the ninety-second annual meeting of the Medical Society of the State of New York, Albany, Jan. 25, 1898, with the above title.

He called attention (1) to the difficulty in remembering the gross anatomy of the brain, and (2) to the almost universal presence of optic neuritis in cases of brain tumor.

He attempted to overcome the difficulty in regard to the anatomy of the brain by formulating the following rules, which are somewhat unique and original and at the same time easily remembered:

Rule of Two.—1. The nerve centers are divided into two great divisions, (1) encephalon, (2) myelon. 2. The encephalon is divided into two subdivisions, (1) cerebrum, (2) cerebellum. 3. The cerebrum, cerebellum and myelon are divided into two hemispheres each, (1) right, (2) left. 4. The encephalon is indented by two great fissures, (1) longitudinal, (2) transverse. 5. Into these two great fissures there dip two folds of the dura, (1) falx cerebri, (2) tentorium cerebelli. 6. There are two varieties of brain matter, (1) white, (2) gray.

Rule of Three.—1. There are three layers of membranes surrounding the brain, (1) dura, (2) arachnoid, (3) pia. 2. Each hemisphere is indented by three major fissures, (1) sylvian, (2) rolandic or central, (3) parieto-occipital. 3. Three lobes, frontal, temporal and occipital, on their convex surface are divided into three convolutions each, superior, middle and inferior, or 1st, 2d and 3d. 4. There are three pairs of basal ganglia, (1) striata, (2) thalami, (3) quadrigemina. 5. The hemispheres of the brain are connected by three commissures, (1) anterior, (2) medi, (3) post-commissure. 6. The cerebellum consists of three portions, (1) right, (2) left hemisphere, (3) vermes. 7. There are three pairs of cerebellar peduncles, (1) superior, (2) middle, (3) inferior. 8. The number of pairs of cranial nerves, in the classifications of Willis and Sommering,

can be determined by adding 3 to the number of letters in each name; that of Willis making 9, and that of Sommering making 12, (or the name containing the more letters has the largest number of pairs of nerves, and vice versa). 9. The cortex of the cerebellum is divided into three layers of cells, (1) granular, (2) Purkinje's cells, (3) a molecular layer.

Rule of Five.—1. Each hemisphere is divided externally into five lobes, of which four are visible, (1) frontal, (2) parietal, (3) temporal, (4) occipital, and one invisible, (5) insula (Isle of Reil). Roughly speaking, the visible lobes correspond to the bones of the cranium; that is, the frontal lobe is underneath the frontal bone, the parietal lobe beneath the parietal bone, etc. 2. The brain contains five ventricles, of which four are visible—the right and left—or 1st and 2d, the 3d and the fourth, and one invisible, the 5th or pseudo-ventricle. 3. The cortex of the brain contains 5 distinct layers of ganglion cells.

Studying carefully 100 cases of brain tumor, in which an ophthalmoscopic examination had been made for the presence or absence of choked disc (optic neuritis), Krauss announces the following conclusions:

1. Optic neuritis is present in about 90 per cent. of all cases of brain tumor.

2. It is more often present in cerebral than in cerebellar cases.

3. The location of the tumor exerts little influence over the appearance of the papillitis.

4. The size and nature of the tumor exerts but little influence over the production of the papillitis.

5. Tumors of slow growth are less inclined to be accompanied with optic neuritis than those of rapid growth.

6. It is probable that unilateral choked disc is indicative of disease in the hemisphere corresponding to the eye involved.

7. It is doubtful whether increased intracranial pressure is solely and alone responsible for the production of an optic neuritis in cases of brain tumor.—*Philadelphia Medical Journal.*

EDITORIAL ITEMS.

Tait versus Pessaries.—Lawson Tait affirms that the use of pessaries often leads to pyosalpinx.

Formalin for Malignant Growths.—A 4 per cent. solution applied on gauze is highly recommended in inoperative carcinoma.

The Brand Method in Camp Typhoid.—The mortality at Chickamauga Park under this treatment has been about 6 per. cent.

The Psychiater.—This is the appropriate title of a new special quarterly journal published by the medical staff of the Illinois Eastern Hospital.

Oxygen in Opium Poisoning.—Artificial respiration with pure oxygen is reported to have saved a patient who would otherwise certainly have died.

Chloroform on the Battle Field.—This anesthetic was used almost without exception in the late war, with not a single death attributable to its employment.

Teething and Ear Disease.—Eruption of the molars is often preceded by purulent otitis media, says Morrow in the *American Medico-Surgical Bulletin*.

Modified Cows Milk.—When eczema is caused in infants by the use of barley, oatmeal or rice water with milk, gelatin jelly may be substituted to advantage.

Chasmus.—Peristent yawning, says Hugh T. Patrick (*New York Medical Journal*, Aug. 27th), may be one of the earliest symptoms of general paralysis.

Hemophilia.—Delace (quoted in *Medicine*) reports a serious case of this disease, in which ergotin and hemostatics failed, which was at once apparently cured by thyroid capsules.

Medical Students.—According to the *Alienist and Neurologist*, Chicago has 2,500 of the species; Philadelphia, 2,300; New York, 1,900; St. Louis, 1,400; and Baltimore, 1,300.

Puerperal Fever.—Pulmonary tuberculosis frequently originates during the puerperium, and is likely, from the similarity of temperature, to be mistaken at first for puerperal sepsis.

The Diazo Reaction.—In addition to its well attested diagnostic value in typhoid fever and miliary tuberculosis, this test is claimed to be of service in primary carcinoma of the ovaries.

Red Hair.—Every misfortune has its compensations. Though a red haired person has only a fourth as many hairs as heads of other colors, yet, on the other hand, he rarely becomes bald.

An Important Decision.—The United States Supreme Court has decided that any medical practitioner once convicted of a felony is thereafter debarred from ever practicing his profession.

Indicanuria in Children.—A persistent excess of indican in the urine, after excluding intestinal diseases and suppurative processes, points to tuberculosis, says Cataneo (quoted in *Pediatrics*).

The Cranial "Cracked-Pot" Sound.—Carson, in *Annals of Surgery*, calls attention to the value of this percussion sign in the diagnosis of cerebellar tumors, as confirmed by post mortem findings.

Syphilitic Dysphagia.—This, the common form, can be readily differentiated from other causes by vanishing on forty-eight hours' treatment with potassium iodide, says Dr. Garel in the *Journal*.

Dysmenorrhea and Sterility.—Painful menstruation in a sterile patient is strong evidence that there is tubal inflammation and occlusion, says Lawrence in the *International Journal of Surgery*.

Epilepsy versus Matrimony.—Marriage between epileptics is forbidden by the laws of Texas and Massachusetts. In the latter state syphilitics and alcoholics are also prohibited from indulging in matrimony.

Antotoxemic Metrorrhagia.—Casten (quoted in *New York Medical Journal*) considers that the metrorrhagia of young girls is often the result of stercoræmia, due to obstinate constipation, with fecal accumulation.

The Therapeutic Digest and Formulary.—Kansas City has a new monthly journal under the above title, which is fairly representative of its contents. Barring a few "bad breaks" in spelling, the first number is "all right."

The Porro Operation vs. Total Hysterectomy.—Prof. Hermann J. Boldt (*American Journal of Surgery and Gynecology*, August) concludes that the latter method possesses the following advantages: Less danger of infection; practically no danger from secondary hemorrhage; less danger of intestinal obstruction; more rapid convalescence; less liability of ventral hernia.

Sterilization of Catheters.—A simple and highly effective method is to immerse the catheter in a $2\frac{1}{2}$ per cent. formalin solution for a few minutes or to flush the instrument with this liquid and then rinse with boiling water just before using.

Preservation of Chloroform.—Chloroform should be kept well corked and in a dark place. Otherwise phosgene gas may be generated. This is a deadly poison, and doubtless not a few deaths attributed to chloroform have been really the result of this product.

Auscultation of the Mouth.—Galvagni (quoted in *New York Medical Times*) recalls to us the importance of this method in cases of incipient tuberculosis. In addition to intensified rales there is often a peculiar, jerky, expiratory glottic sound which can be heard in this way.

The Treatment of Suppuration with Alkaline Dressings.—Brucket (quoted in *Gaillard's Medical Journal*) has found that bicarbonate of sodium, either dry or in a 2 per cent. solution, or in a 4 per cent. vaseline ointment, rapidly reduces the inflammation and produces speedy healing.

Aseptic Bread.—In Berlin, says the *Dietetic and Hygienic Gazette*, the bakers have been induced to prevent contamination from handling or from the dust of the streets by enclosing each loaf, as soon as baked, in a loaf-shaped paper bag, which is quickly sealed by twisting the open ends.

Rheumatoid Arthritis.—Bannatyne (quoted in *Monthly Cyclopedia of Practical Medicine*) advocates the administration of guaiacol carbonate, 5 to 15 grains three times daily. The affected joints should also be painted over every night with a mixture of equal parts of pure guaiacol and olive oil.

Enuresis of Children.—The *Cleveland Journal of Medicine* states that lycopodium has been used with success in this affection, and is in some cases more efficient than belladonna. Twenty drops of the tincture should be given three times a day, and this dose may be increased to 40 or 50 drops.

Carbide of Calcium in Uterine Cancer.—Prof. Etheridge speaks very highly of this substance in the treatment of inoperative uterine cancer (September *Clinical Review*). He puts a small piece of the drug in the uterine cavity, or powders the ulcer with it. All his patients have improved in health, and the offensive odor, hemorrhage and discharge are all abolished. He thinks the good results are due to acetylene gas, generated by the union of water in the tissues with the calcium compound.

The Look of the Meatus Urinarius.—Dr. B. H. Daggett (quoted in *Medicine*) concludes that a bright red, bulging, edematous meatus indicates acute urethritis; dull red and patulous, passive congestion of prostate; dark, red, puffy, herpetic, with flabby elongated prepuce, indicates senile hypertrophy of prostate; blanched, anemic and pinched in atrophy or tuberculous wasting.

The Local Treatment of Sciatica.—Gennatoz (quoted in *New York Medical Journal*) advocates painting along the course of the nerve with two to four coats of strong hydrochloric acid, dressing with absorbent cotton. The procedure is repeated every other day, taking care to avoid the sanguineous vesicles that will have been formed. Three to five applications are usually sufficient to effect a cure.

Carbonated Waters as Diuretics.—Dr. A. W. Perry reports the results of over fifty experiments along this line, upon a healthy man, in the September *Pacific Record of Medicine and Surgery*. He found on the average that where no liquid or food had been taken for four hours previously, the urine secreted in 80 minutes was 75 grammes; after plain water at the same temperature, 96 grammes; after the same amount of carbonic acid water, 135 grammes.

The Southern Surgical and Gynecological Association.—Will hold its next meeting in Memphis on the 8th, 9th and 10th of November. The Secretary, Dr. William E. B. Davis, of Birmingham, Alabama, informs us that the meeting promises to be one of the most successful in the history of the association, papers having been promised by many of the leading surgeons and gynecologists of the country, especially of the South. Members of the medical profession are cordially invited to attend.



BOOKS.

Elements of Histology.—By E. Klein, M.D., F.R.S., Lecturer on General Anatomy and Physiology, and J. S. Edkins, M.A., M.B., Joint Lecturer and Demonstrator of Physiology in the Medical School of St. Bartholomew's Hospital, London. With 296 Illustrations. Revised and Enlarged Edition. Lea Brothers & Co., Philadelphia and New York.

The fifth edition of this standard little volume is a third larger than its immediate predecessor of nine years ago, and contains 500 16mo. pages. Two new chapters have been added, while all the text has been subjected to careful revision and amplification. The chapters on the central nervous system have been practically rewritten in consonance with the recent discoveries of Golgi, Ramony, Cajal, Kolliker, Leuhossek and Retzis. The numerous illustrations, microphotographic and otherwise, are well selected and skillfully executed. The text is clear and compact. The book is such as students like and need most.

A Text Book Upon the Pathogenic Bacteria.—For Students of Medicine and Physicians. By Joseph McFarland, M.D., Professor of Pathology in the Medico-Chirurgical College, Philadelphia; Pathologist to the Medico-Chirurgical Hospital and to the Rush Hospital for Consumption and Allied Diseases, Philadelphia. With 134 Illustrations. Second Edition, Revised and Enlarged, Octavo, 497 pages. Price, \$2.50 net. Philadelphia: W. B. Saunders, 925 Walnut Street, 1898.

"The forty-seven chapters of this work are intended," says the author, "to convey to the reader a concise account of the technical procedures necessary in the study of bacteriology, a brief description of the life history of the important pathogenic bacteria, and sufficient description of the pathological lesions accompanying the micro-organismal invasions to give an idea of the origin of symptoms and the causes of death." The finished work amply fulfills the purpose of its maker. General considerations on bacteria, morphology and biology, immunity, susceptibility, sterilization and disinfection, cultures, experimentation upon animals and the bacteriologic examination of air, water and soil make up nearly one-third of the text. The second and main portion is devoted to the special discussion of acute and chronic inflammatory, toxic, septic and miscellaneous diseases. The author describes at length his modification of the Widal test for securing accurate dilution of the blood by means of capillary tubes. In the present edition the directions on technique have been reinforced so as to better fit the work for

laboratory use. New chapters have also been added on the bacteriology of whooping-cough, mumps, yellow fever, hog cholera, swine plague, various bacilli, and on methods of determining the value of antiseptics and germicides, and on the thermal death point. All the advances in bacteriology during the past two years are described with full reference to the original literature. It contains all the essentials of the subject, presented in a highly attractive and readable style. It is adapted equally to the purposes of the latter day medical student and the practitioner who graduated before the advent of practical bacteriology.

Diseases of Women.—A Manual of Gynecology, Designed Especially for the Use of Students and General Practitioners. By F. H. Davenport, A.B., M.D., Assistant Professor in Gynecology, Harvard Medical School. Third Edition, Revised and Enlarged, with 156 Illustrations, Twelvemo, 391 pages. Lea Brothers & Co., Philadelphia and New York, 1898.

This little volume is an essentially plain and practical summary of what is most important and most useful in the diagnosis and treatment of diseases of women. There is a brief chapter on pelvic anatomy and another exceptionally pointed one on methods of examination. The remaining seventeen chapters take up the diseases of the external and internal genitalia in the usual regional order. The author has limited his descriptions of surgical procedures and local and general medications to such as he has found of the greatest benefit in his individual practice. The numerous illustrations are simple, but sufficient. As an elementary work for the classes for which it is intended, the book is to be very highly recommended.

A Text Book of Materia Medica, Therapeutics and Pharmacology.—By George Frank Butler, Ph.G., M.D., Professor of Materia Medica and Clinical Medicine in the College of Physicians and Surgeons, Medical Department of the University of Illinois; Professor of General Medicine and Diseases of the Digestive System, Chicago Clinical School. Second Edition, Revised, Octavo, 860 pages. Price, in Cloth, \$4.00; Sheep or Half Morocco, \$5.00 net. Philadelphia: W. B. Saunders, 925 Walnut Street, 1898.

There are a number of points of distinction in this work which merit special mention. The reason why a certain drug acts in a certain manner is explained as fully as the present science of materia medica permits and illustrated with simple diagrams. Remedial agents are classified according to their general action, in twenty-one groups. The practical indications for the different members of each group are discussed and discriminated, followed by a comprehensive description of the origin, properties, dose, antagonists, incompatibilities, synergists, physiologic action, contraindications and best

methods of administration. The name of each drug is given in English and in the Latin nominative and genitive, with pronunciation marked. The pharmaceutic and unofficial preparations of the National Formulary are arranged systematically, and the percentage composition of each is stated. A very practical chapter is that on correct prescription writing and incompatibles. Still another is the tabular summary of untoward effects of drugs. A complete clinical index offers ready reference in applied therapeutics. The author gives a succinct account of all the important additions that have been made in materia medica during the two years since the first edition was issued. The work is well worthy of its great popularity.

Pathologic and Morbid Anatomy.—By T. Henry Green, M.D., Lecturer on Pathology and Morbid Anatomy at Charing-Cross Hospital Medical School, London. New (eighth) American from the Eighth and Revised English Edition. In One Very Handsome Royal Octavo Volume of 600 pages, with 215 Engravings, many being new, and a Colored Plate. Cloth, \$2.50 net. Lea Brothers & Co., Publishers, Philadelphia and New York.

Eight American and eight English editions of a medical work is a record of which any author may well be proud. Its popularity is based firmly on superior intrinsic merit. The author's descriptions are concise and lucid, and the style of the text in general is such as to make it delightful reading—for a text book. The educational value of the various chapters are much enhanced by the admirable system shown in the arrangement of the sections and by the abundance of artistic illustrations. The latest revision has been thorough in elision as well as in additions. In every practical sense the work is complete and stands at the head of all manuals on this subject for the use of medical students.

An American Text Book of the Diseases of Children.—Including Special Chapters on Essential Surgical Subjects; Orthopedics; Diseases of the Eye; Ear, Nose and Throat; Diseases of the Skin; and on the Diet, Hygiene and General Management of Children. By American Teachers. Edited by Louis Starr, M.D., Consultant Pediatricist to the Maternity Hospital, Philadelphia; Late Clinical Professor of Diseases of Children in the Hospital of the University of Pennsylvania. Assisted by Thompson S. Westcott, M.D., Instructor in Diseases of Children, University of Pennsylvania. Second Edition, Revised. In One Handsome Imperial Octavo Volume of 1244 pages. Price, Cloth, \$7.00; Sheep or Half Morocco, \$8.00. For Sale by Subscription. Philadelphia: W. B. Saunders, 925 Walnut St., 1898,

This work, the conjoint production of sixty-three of America's best pediatricists and medical teachers, is notable in every good way. It is broad and complete, embracing also orthopedics, dermatology and diseases of the organs of special sense of the rectum and genito-

urinary tract. It is thoroughly practical, diagnosis and treatment being made paramount. It is fresh and up-to-date in all respects. A number of chapters have been entirely rewritten, and fifty pages of new matter has been added, principally on "Modified Milk," "Lithemia," and orthopedics. The book is typographically perfect and is beautifully illustrated with twenty-eight full-page colored plates and a number of black and white figures. It is all and more than could be desired by the student of pediatrics; for the practitioner it is a treasure-store for reference, made easy by an admirable index of forty pages.

The Refraction of the Eye.—A Manual for Students. By Gustavus Hartridge, F.R.C.S., Senior Surgeon to the Royal Westminster Ophthalmic Hospital; Ophthalmic Surgeon and Lecturer on Ophthalmic Surgery to the Westminster Hospital; Ophthalmic Surgeon to St. Bartholomew's Hospital, Chatham, etc. With 104 Illustrations, Ninth Edition. London: J. & A. Ghurchill, 7 Great Marlborough Street, 1898. Twelvemo, 267 pages. Price, \$1.50. For Sale by P. Blakiston's Son & Co., Philadelphia.

This book is what it purports to be, and tells all about refraction and errors of refraction, beginning with a chapter on optics and ending fitly with one on spectacles. Causes and symptoms and methods of diagnosis and treatment are described and explained clearly and scientifically. Retinoscopy and other newer tests receive adequate attention. In the fitting of glasses a considerable number of cases are related, stating in detail the actual steps taken to secure the most satisfactory results. A ready understanding of the most difficult points is much facilitated by the numerous excellent wood cuts. The monograph amply deserves the unusual popular recognition it has already been accorded, and has indeed no equal in the English language.

Dudley's Gynecology.—A Treatise on the Principles and Practice of Gynecology. For Students and Practitioners. By E. C. Dudley, M.D., Professor of Gynecology in the Chicago Medical College. In One Very Handsome Octavo Volume of 652 pages, with 422 Engravings, of which 47 are Colored, and Two Full Page Plates in Colors and Monochrome. Cloth, \$5.00 net; Leather, \$6.00 net.

This work consists of fifty chapters, arranged in five parts. The first division, on "General principles," is a comprehensive exposition of the physiological periods in the life of women, antiseptics and asepsis, pelvic diagnosis, local treatment, minor and major operations, with special chapters on drainage and after-treatment, and last, but not least, the relations of dress to the diseases of women. The second, and largest part, treats of inflammations, which are considered from a pathologic and etiologic standpoint

rather than in the common regional method. The author's plan in this respect has many advantages, particularly as to the avoidance of reiteration and the presentation of pelvic affections in the combined forms which they ordinarily assume. In fact the trend of the argument throughout the book is to emphasize the functional unity of all the reproductive organs. In part three, tumors, tubal pregnancy and malformations are discussed and clearly differentiated. Part four is devoted to traumatisms, and includes the best chapter ever written on the subject of perineorrhaphy. The final division of the work is on displacements, which are made plain to the dullest understanding by a large number of colored and uncolored diagrams. The last chapter of the book, on massage, strongly endorses the Brandt method, and clearly delineates its indications, contraindications and special modes of application in the various pelvic lesions. The author's descriptions of selected modern operations are direct and definite, and are well elucidated by a generous supply of first-class original drawings. The book in its entirety is worthy of all praise.

An American Text Book of Gynecology, Medical and Surgical.—For Practitioners and Students. By Henry T. Byford, M.D.; J. M. Baldy, M.D.; Edwin B. Cragin, M.D.; J. H. Etheridge, M.D., William Goodell, M.D.; Howard A. Kelly, M.D.; Florian Krug, M.D.; E. E. Montgomery, M.D.; William R. Pryor, M.D.; George M. Tuttle, M.D. Edited by J. M. Baldy, M.D. Second Edition, Revised. With 34 Illustrations in the Text, and 38 Colored and Half-Tone Plates. Imperial Octavo, 718 pages. Price, Cloth, \$6.00; Sheep or Half Morocco, \$7.00. For Sale by Subscription. Philadelphia: W. B. Saunders, 925 Walnut Street, 1898.

From the first publication of this work, four years ago, it has steadily grown in favor both with students and practitioners. The reasons for its wide popularity are based principally upon the practical tact and wisdom in literary selection and execution shown by the authors, all of whom are teachers in the leading American colleges and hospitals. The arrangement of the contents is clinical rather than pathologic and commends itself to the good sense of readers generally. A prominent feature of the work is the large number of clear and beautiful illustrations of anatomic relations, pathologic conditions, methods of examination and surgical technique. The present edition has been revised in conformity with all the numerous changes in methods and details that have marked the preceding quadrennial. The most notable alterations have been made in the sections on hysterectomy, plastic work and diseases of the bladder, urethra and uterus. Forty of the old illustrations have been replaced by better ones, in addition to a number

entirely new. The book is certain to have an ever-widening sphere of usefulness, both in and without medical colleges, as a complete and reliable reference and working text book.

A Clinical Text Book of Medical Diagnosis.—For Physicians and Students.

Based on the Most Recent Methods of Diagnosis. By Oswald Vierordt, M.D., Professor of Medicine at the University of Heidelberg. Authorized Translation, with Additions by Francis H. Stuart, A.M., M.D. Fourth American Edition, from the Fifth German, Revised and Enlarged, with 194 Illustrations. Price, in Cloth, \$4.00 net; Sheep or Half Morocco, \$5.00 net. Philadelphia: W. B. Saunders, 925 Walnut Street, 1898.

This book, which has appeared in five editions in nine years in the author's native country, and has been translated into English, Russian and Italian, ranks among the few great ones in modern medical literature. The particular purpose of the volume, according to the author, is to furnish the physician with the materials by which he may make himself an accomplished diagnostician in all branches of medical diagnosis. Judging from a considerable reference use of the present and past editions, the work is all that could be desired by a practicing physician in need of quick and reliable instruction on the diagnosis of an obscure individual case. The author's great experience has enabled him to give each symptom its proper perspective in the picture of disease. The work is inductive in nature and is taken up largely with the differentiation of symptoms in relation to disease. All the modern methods of examination are described fully, clearly and accurately. The translation appears to be quite literal. The present edition is in line with the latest scientific progress, the most noticeable changes having been made in the sections on the nervous system and on gastric digestion. We bespeak for this work merely a careful examination, after which it will sufficiently recommend itself.



SELECTIONS.

Tuberculosis of the Lung.—Dr. Landon B. Edwards, Professor of Practice of Medicine, University College of Medicine, Richmond, Va., reports, in Vol. LIII., No. 15, *New York Medical Record*, 35 cases of tuberculosis of the lungs treated by serum, with 11 total recoveries, and by recovery he means disappearance of bacilli, healthy respiratory action, chest expansion increased from one to two and a half inches, flesh increased to normal, and that the patients look well and according to physical signs and symptoms are well. He notes other patients improving and states that the record is greatly better than he ever obtained with any other treatment than serum; that he had used no other serum than Paquin's of St. Louis.

For Acute Cystitis.—Bromide of potash, oz., $\frac{1}{2}$; fld. ext. gelsemin, gtt., 10; fld. ext. hyoscyam, dr., 2; lithiated hydrangea (Lambert), q.s. ad, oz., 4. Mix. A dessertspoonful every four hours. Milk and flaxseed tea as drinks.—*Kansas Medical Index*.

Dr. S. C. Martin, Professor of Dermatology and Hygiene, Barnes Medical College, St. Louis, Mo., writes: "After having tested Hagee's Cordial Cod-Liver Oil Comp. in my practice for a number of years, the results have been so uniformly gratifying that I now rarely prescribe any other cod-liver oil preparation. The points in its favor are: 1st, the desired ingredients; 2d, their combination in a palatable and assimilable form, which insures a sufficiently prolonged use to produce substantial results."

Sanmetto.—J. S. Jordan, M.D., of Indianapolis, Ind., writing, says: "I have been using Sanmetto for a number of years, and with unvarying good results. In cases of prostatitis, prostaticorrhea, cystitis, chronic gonorrhea and kindred genito-urinary troubles I find it one of the most valuable acquisitions to our materia medica. In irritable conditions of the neck of the bladder, so frequent among females, Sanmetto has proven a God-send. I can also heartily recommend it as the very best aphrodisiac I have ever used."

Instructive Exhibits.—Among the many attractive exhibits at this year's Denver meeting, that of Imperial Granum, recognized by many leading physicians as the standard among prepared foods, occupied a prominent space, and the representative in charge was kept busy explaining to the visiting physicians the superiority of this prepara-

tion. Handsome sample boxes of the Food and copies of The Imperial Granum Co.'s valuable clinical record were presented to each physician in attendance.—From *The Journal of the American Medical Association*, Chicago.

An All-Round Uterine Tonic.—I have found Dioivurnia, prepared by the Dios Chemical Co., of St. Louis, to meet the most exacting requirements of a general all-round uterine tonic, and know of no other preparation on the market to fill all the requirements so well. I have used it in a case of chronic uterine trouble, following a miscarriage, in which the patient, a multipara past 40 years of age, had been a sufferer with uterine trouble for over fifteen years. Countless other remedies had been tried until the patient, almost despairing of recovery, was about to go under an operation, when Dioivurnia was tried, acting almost like magic. I have found it equally satisfactory in several other cases of chronic uterine trouble and find it, where given a fair trial, an invaluable assistant.—Thos. J. Arundel, M.D., 202 N. Fruit Street, Youngstown, O.

The Eradication of the Gonococcus.—In an instructive article on the treatment of acute urethritis in the male, published in the *Philadelphia Medical Journal* of August 13th, Dr. James Pedersen, Instructor in Genito-Urinary Diseases in the Post-Graduate Medical School and Hospital, states that in the treatment of this disease three indications are met: First, the eradication of the etiologic micro-organism; second, the termination of the inflammatory process; third, the repair of the damaged mucous membrane. To meet the first indication, Dr. Pedersen has lately made use of Protargol, which he considers superior to argonin and nitrate of silver. Under the administration of a 1 per cent. solution of Protargol, instituted with the first sign of the discharge, he has seen the gonococci disappear from the pus in two days. For forty-eight hours the discharge increased, then began to subside; on the sixth day there was only the morning drop. After the discharge has apparently ceased, however, it is advisable to continue the injections for a few days and then to gradually discontinue them tentatively until the gonococci cease reappearing. With regard to the second indication, the author has observed that in the average case of gonorrhoeal urethritis, in which Protargol has been employed in the manner indicated, a hand injection of a solution of any one or two of the astringents, mineral or vegetable, usually suffices. The injection recommended consists of zinc iodid and zinc chlorid, each $\frac{1}{4}$ gr. to 1 fluidounce of distilled water. According to the degree of inflammation present the injection is used either cold or hot. With reference to the third indication, according to the author's experience, nitrate of silver in solution is by far the best agent in all forms and degrees of urethritis. It is his

custom to employ it either by means of the Ultzmann syringe, or, better still, by the Bangs syringe-sound, or by means of cotton swabs through the endoscope. While these have proved the best means for meeting the three indications mentioned, the author also recommends that we must not lose sight of the patient's general condition. In acute posterior urethritis the remedial agents chiefly relied upon are silver nitrate (by instillation, application or irrigation) and solutions of potassium permanganate by irrigation, the former drug being preferred by the author.

Last September a lady called on me, age 45, married, saying: "I would like you to examine my hand. I heard you was good on old sores." I asked her how long her hand had been in that condition. "Five years," she said, "and I have carried it most of the time bound to my shoulder, for when I carried it down the pain nearly made me wild." The case was pronounced tuberculosis of the joints by no less than nine different physicians and treated by all of them—curreted, burnt out with caustic potash, all kinds of washes, all kinds of salves. The joints were all open, the back part of the hand bone exposed. This was the condition of the hand when I saw it. Amputation had been recommended and refused. To say it was a desperate case is drawing it mild. I gave her a four-ounce box of Unguentine (Norwich Pharmacal Co., Norwich, N. Y.) and told her to spread it on a linen rag and keep it on continuously, change once a day. I never expected to see the case again. Six weeks after she came back—the hand was better. She had been using Unguentine until the 10th of March, 1898. This hand at the present time is entirely well, no pain, and enjoys splendid health. The case is notorious in this county, Saline, and McPherson, where the M.D.'s reside who treated the case. Her name is Mrs. Nygram, and lives one-half mile north of Bridgeport, Saline Co., Kan. Any one can write to her and get the facts as I have stated, and Unguentine done the business. Yours truly, C. H. B. Gile, M.D., Falum, Kan.—*Canadian Journal of Medicine and Surgery*.

The Choice of an Iron Preparation.—In the administration of iron in the treatment of anaemic conditions four facts must be carefully considered: Firstly, whether the preparation is one that will require much change in the alimentary canal before its absorption; secondly, whether it will be well tolerated by the digestive organs; thirdly, whether it will be absorbed in such form as to be readily converted into haemoglobin, and fourthly, whether it will be palatable and free from constipating effects. To insure the rapid absorption of iron, a preparation must be selected in which the iron is combined with a diffusible proteid, which will require no preliminary digestion. This has been done in Ferro-Somatose. The iron here is in intimate

chemical combination with a proteid base which is rapidly absorbed without taxing the digestive organs. On the other hand, after its absorption in this form, it is quickly reconverted into the iron containing principle of the blood, because it resembles haemoglobin closely in its composition. As regards palatability and freedom from constipation, Ferro-Somatose leaves nothing to be desired. Being practically free from taste and odor, and being freely soluble, it can be administered in a variety of fluids to suit the individual taste of the patient and thus never becomes repugnant, as is the case with many iron preparations which have a special taste and odor. Clinically speaking, Ferro-Somatose, by reason of its high contents of albumoses, can lay claim to the title of a chalybeate nutriment which will not only improve the quality of the blood, but will prove a valuable auxiliary in the nutrition of the patient.

The External Use of Salicylic Acid.—A point of much importance, which has been overlooked in the use of salicylates in the treatment of rheumatic and neuralgic conditions is the external application of the remedy. The efficacy of this procedure is at once apparent to the practical and progressive physician, since thereby he can apply the drug directly to the part affected, so that the greatest quantity is absorbed where it is most needed. Furthermore, by this method the disturbing effects of internal medication upon an irritable stomach and sensitive nerves can be entirely avoided. Some of the most eminent French physicians have ascertained by extensive clinical experimentation that the salicylates, and especially the salicylate of sodium, dissolved and used as a liniment, when applied to the fleshy part of the thigh, where the skin is of a delicate texture, are rapidly absorbed and slowly eliminated, thus securing the full potency and value of the remedy, with the least disturbance and irritation to the alimentary tract. The internal administration of any one of the Tongaline preparations, as indicated, given at short intervals, and each dose washed down with plenty of hot water, as hot as the patient can bear it, may be supplemented by the local application of Tongaline Liquid. In this manner the therapeutic effects, not only of the salicylate of sodium, but of the other ingredients of Tongaline are felt very promptly and to such an extent that the acute pains of rhematism and neuralgia are quickly allayed and the patient enabled thereby to obtain refreshing and tranquil sleep, while the strong eliminative action of Tongaline, by being used both internally and externally, speedily induces the desired results.

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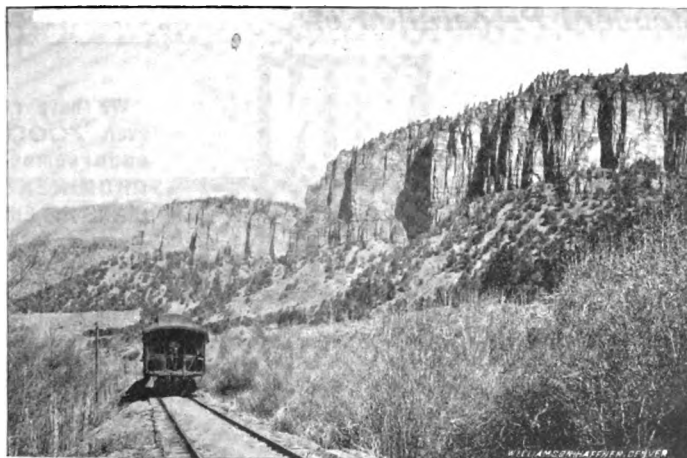
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Fig. XVII—Dorsal Position.

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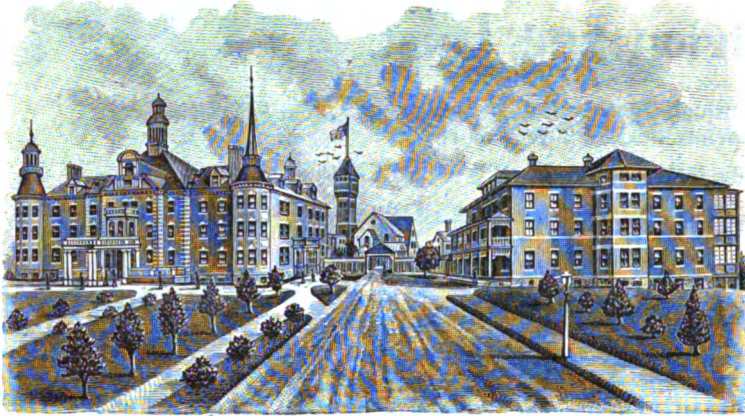
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DENVER MEDICAL TIMES

VOLUME XVIII.

NOVEMBER, 1898.

NUMBER 5.

ORIGINAL COMMUNICATIONS.

LOCAL TREATMENT IN CHOREA.

By EDWIN L. THORN, M.D.,
Salt Lake City, Utah.

Chorea has a history extending far back through the middle ages. It was recognized, and its phenomenal symptoms were familiar, long before many other diseases were known, which are to-day far better understood by medical men than chorea.

We learn from history that in the middle ages it assumed the form of an epidemic at different times. "In this country there have been many epidemics of the same disorder, on a small scale. An outbreak occurred a few years ago in a children's asylum in Philadelphia. Prompt measures, and separation of those affected from the well children, checked the disorder, which at one time threatened to spread through the entire institution."

These epidemics were quite different from the chorea referred to in this paper. They were clearly of a hysterical type, while those alluded to here constitute a systematic disease, characterized by irregular spasmodic movements of the limbs and other parts of the body.

The etiological features are somewhat obscure. However, in recent years discoveries have multiplied to such a degree that methods of treatment may be more intelligently formulated for controlling as well as curing the affection.

Chorea occurs in connection with pathological changes in the brain, spinal cord and the peripheral nerves. It occurs in connection with rheumatism, organic and functional, disease of the heart, pregnancy and anaemia.

A very large percentage of such cases end in recovery sooner or later. The mortality being low, reduces opportunities for post mortem for the purpose of investigation to the minimum. In the earlier autopsies microscopical observations only were made. Necessarily those conditions which were subsequently found, through histological investigation, to touch directly upon the disease were overlooked.

The symptoms so forcibly thrust before us on ocular inspection of such cases, especially those of a general character,

suggest some change within the central nervous system. "Consequently of late years a number of careful autopsies have been made in cases of chorea. The brain and spinal cord have been closely examined, and in almost every instance some lesion has been found in both of these organs. Yet the more modern continental observers believe it to be largely a spinal affection. Steiner reported the results of post mortem examinations in three fatal cases. In one case he found cerebro-spinal anaemia, serous effusion into the spinal canal, and proliferation of the connective tissue in the upper part of the cord; and in another, hyperaemia of the brain and cord; the third, condition not stated. Todd, Stenhouse, Kirks, Broadbent, Ogle, Tuckwell, Hughlings Jackson, and Bastian, all incline toward the embolic theory, emboli being carried by the middle cerebral artery to the corpus striatum, the supposed seat of the disease. Ogle and Tuckwell have found embolic plugging in this locality. Chauvein, Carville, Burt and others, who experimented by dividing the cord, concluded that at least some forms of chorea were of spinal origin. Le Gros and Onimus were also of the opinion favoring spinal origin. Excitation of the posterior column accelerated the movements, and freezing this part of the cord reduced their intensity. These observers concluded that the seat of chorea was in the cells of the posterior horns, or in fibers connecting them with the great motor cells."

"Meynart and Ellischer found changes in the peripheral nerves. The same observers also found degeneration of a large number of the cortical cells, some swollen, others shriveled. These extended as far forward as the third frontal convolution. There was general connective tissue thickening and proliferation in the motor tracts of the brain and cord. Ellischer found in the posterior column sclerosis in the gray matter, which was hyperaemic."

The foregoing quotations from our hardest workers and most thorough investigators are given to show the fact, that changes from the normal take place constantly in the brain and spinal cord, in choreic patients, but in all the work cited there is nothing to indicate a constancy of pathological changes in other organs or parts of the economy. The heart may be affected incidentally; rheumatism may occur in choreic persons, as well as anaemia, though the latter is more constant, owing probably to altered nerve influence over the circulation and blood forming organs. Why chorea occurs so frequently in connection with pregnancy, can better be stated by quoting from E. P. Davis, of Philadelphia, in *American Text Book of Obstetrics*:

"There is no disorder of the nervous system so manifestly aggravated by pregnancy as chorea. The physiological plethora characteristic of normal pregnancy seems to exaggerate the func-

tional activity of the nervous system, and it results in marked exacerbation of all pathological phenomena. It is most apt to occur in those who have suffered a previous attack during childhood, and rarely occurs in those over eighteen years of age, except in pregnancy.

The method of treatment to which I wish to direct special attention is based upon the pathological conditions cited above. Remedies are legion. Arsenic and electricity probably have been more extensively prescribed than any other medicine, and I believe that both have accomplished quite a good deal by way of modifying the disease. For internal administration arsenic certainly stands at the head of all medicines for its tonic and alterative properties, so far as the older class is concerned. It is possible that we may yet discover that out of the numerous combinations with phenol, an efficient remedy may be evolved. The chemical combination—pheno-bromate—perhaps would be of much service in many cases, especially those having indications of hyperaemia in the brain or cord. Electricity, especially the galvanic, has in my experience manifested at least a modifying effect upon the choreic movements, but I do not deem it curative. I believe too little is said in our text books in reference to local treatment. And too little attention is given the same by the profession. Some of the later text books briefly mention the application of cold water, ice, sul. ether, etc., to the spine as being of service, by way of aiding other forms of treatment.

There is no method of treatment with which I have had any experience that has given such prompt and satisfactory results as the systematic spraying of the occiput and spine with ether sul. I direct the nurse or attendant to strip the back of the patient of all clothing, and with an atomizer spray the back and base of the head, and the spine, down to the middle of the lumbar vertebra, with sulphuric ether, for from five to ten minutes, or until the skin feels as cold as ice, this to be repeated two or three times each day, owing to the violence of the attack. This has without exception produced a marked change for the better in the few cases in which I have had the opportunity to observe its effect, or to have heard from others who did. Improvement has continued until a perfect cure has been the result, in a short time, as compared with other cases whose course I have observed. This does not interfere in any way with any plan of internal medication which any one would be likely to adopt, and I believe is less harmful than either cold water or ice. I do not know of any case where even a cold resulted from the spraying of ether.

The following cases are subjoined for the purpose of illustrating the results of this mode of treatment:

December 16, 1884. Fannie H.; developed choreic symptoms soon after a fright, her mother having fallen in a swoon a day or two previously. She was given Fowler's solution, and iron, for several weeks with an apparent improvement in her condition. Again, for some unknown reason, choreic symptoms developed in a more aggravated form than at first. The same treatment was persevered with, and on May, 1885, in addition the galvanic current applied over the entire spine for two weeks. It was then discontinued, and digitalis given alternately with Fowler's solution. Soon after this change the articulation became much improved, and the choreic movements gradually subsided so much that in August, 1885, the disease was hardly perceptible and her general health very much improved. In March, 1886, she suffered a return of the trouble, and on the 13th treatment by electricity was resumed, giving daily seances. This was continued until April 5. No perceptible improvement. At this time I decided to use ether upon the spine by the aid of an atomizer, and discontinued the electricity. Following this change, improvement seemed to progress rapidly, so that in two weeks the choreic movements had so far subsided that the ether was discontinued. She was kept up by tonics for a time, but has never since shown any symptoms of chorea.

On December 30, 1887, Marie H. had a fully developed attack of chorea, with profound anaemia. Administered iron, and at once prescribed the ether spray over the upper two-thirds of the spine. On February 11, 1888, discharged the case as well. There was no return of any choreic symptoms in this case.

Two years ago a physician in this city remarked that he had a case of chorea, accompanying pregnancy, which had been left in his charge by another physician, who had gone on a vacation. That it had been suggested, and he was fearful that it would become necessary to perform an abortion for the safety of the woman. I stated to him my views and experience with the ether spray, and he afterward told me that he had adopted this treatment, and that the patient rapidly improved, went to full term before labor set in, and that both she and the child were enjoying the best of health.

Harold H., a neurotic boy, became one of my patients in 1894. While in a nervous and generally debilitated condition, he developed what I ultimately decided to be a choreic condition in the eyelids. Previously he had been under the care of a prominent oculist of this city, who had treated and prescribed glasses, with the view of remedying the squinting and jerking of the eyelids, a very annoying symptom in connection with his other troubles. The glasses were given a good long trial without any special change in the eye grimaces. Finally his mother asked me if I could not do something to alleviate this condition.

I informed her that I knew of but one method that promised relief, and that was one I had employed in a few cases of general chorea with good results, and that was to spray the post cervical region with sulphuric ether twice each day. This was suggested, and the treatment commenced about two years ago, upon the assumption that it was a case of local chorea. This was continued at intervals for something like six months before all symptoms subsided.

DIAGNOSTIC AND THERAPEUTIC USES OF TUBERCULIN.*

By CHAS. W. AITKIN, M.D.,
Flemingsburg, Kentucky.

A short time since, in conversing with a medical friend upon the use of tuberculin as a diagnostic measure, he made the statement that cases of tuberculosis were so easily diagnosed that we had sufficient means already for making out any case of that kind. Such diagnostic tyros have retarded medical advancement to some extent, and have allowed their patients to rapidly pass into that condition of tuberculosis where nothing could be done except advise palliative measures while waiting the final termination.

Every means for the early recognition of such a serious malady as tuberculosis is received with approval by every medical man who has the interests of his patients and the advancement of his profession at heart.

It has been my misfortune to see many cases of pulmonary tuberculosis advance into the secondary stage that have never been diagnosed by those having charge of the patient.

If any practitioner can be induced, by this brief paper, to use this additional means in making an early diagnosis of tuberculous conditions, I shall feel amply repaid for the time spent in endeavoring to call their attention to this diagnostic means.

There are so many cases of tuberculosis either latent or possibly active in some other organ than the lungs that this agent is of very considerable value to the practitioner. It has been my pleasure to see a reaction following a test dose of tuberculin in tuberculous diseases of the bladder, bone tuberculosis and in other tuberculous conditions. A case here comes to my mind that was several months ago presented to the members of one of our medical associations in Kentucky for diagnosis. There

*Read, by title, at the Mississippi Valley Medical Association, Nashville, Tennessee, October 11, 1898.

were numerous sinuses, which were connected with bone, and the secretion emitted from these openings was of a character that would lead one to suspect tubercular disease. Fully four-fifths of the physicians who examined this case pronounced it a case of bone tuberculosis; some would not express an opinion; two or three looked upon it as most likely specific disease. Six mg. of new tuberculin was used as a test dose, without any reaction whatever. From this test we excluded tuberculosis, and the patient was then put on anti-syphilitic treatment and made a continued recovery.

In cases where such doubt exists as in the one just recited, I feel that one would be justified in freely advocating the use of this preparation if it could do nothing more than clear up the diagnosis in such cases, for we then are positive as to the plan of treatment to pursue, and the good result obtained in this case, after no reaction from tuberculin, was direct evidence of the value of tuberculin as a differential diagnostic agent in such cases.

It is by no means infrequent that practitioners meet with cases, especially of syphilis and of tuberculosis, where the differential signs are not clear enough to distinguish between them and the line of treatment being so different, it is of great advantage for the physician to have at hand a means by which he can discriminate between these two affections.

It has been my privilege to see numerous cases of specific disease treated for tuberculosis, and, no doubt, sometimes tuberculosis is treated for specific disease of remote organs. Tuberculin will positively clear up these cases, there being no reaction following its use in syphilis, while the reaction is very marked in tuberculosis.

The difference in the test or diagnostic dose and the therapeutic dose differs considerably in the hands of many practitioners. I have used favorably from five to eight mg. with adult patients as a diagnostic dose, given hypodermically, while therapeutically I begin, usually, with one-eighth mg., increasing it gradually as positive results are obtained.

In numerous cases of latent tuberculosis where we may not have any symptom calling our attention to this disease other than anaemia, with a possible slight pyrexia in the afternoon, tuberculin is of utmost value, and it is in these beginning cases where we get decided reaction that we get the most benefit from this preparation as a therapeutic measure.

How often is it that we, as general practitioners, find patients who are suffering from the general symptoms of debility, who have a slight elevation of temperature, usually in the afternoon or evening, who look pale, have little or no appetite, and yet we find no real cause from subjective or objective symptoms. These are the cases that give the practitioner worry, and make

many physicians feel that they would like to engage in some other pursuit.

It has been my pleasure to see some of these cases cleared up by the judicious use of tuberculin. Do not understand me to be so extreme as to claim that all such cases are proper ones for tuberculin to be used therapeutically with the expectation of obtaining good results, but since there is no inconvenience or deleterious effect from the use of tuberculin in test doses in cases where tuberculosis does not exist, then it is evident that we should employ it in cases where there is a suspicion at all that tubercular disease may be the cause of these unpleasant symptoms. Therefore, I would advise that in every suspicious case where the diagnosis is not clearly made otherwise, that the patient be given a test dose of this preparation; if tuberculosis is present, there will be a marked reaction from the injection, and if there should be no reaction from a series of these injections given for several days (daily or bi-daily), then I would consider that we could, with safety, exclude any concealed tubercular disease.

In preparing the preparation for use, I would suggest that only a small quantity be prepared at a time, as it is most essential that of all preparations this should be especially aseptic.

For the test dose, I usually have it prepared as follows: Of tuberculin, one cg.; solution of carbolic acid, one-half per cent. two c. c.; from one to one-half c. c. of this solution equaling from five to seven and one-half mg. of tuberculin, is used as the test injection. The reaction from the first dose has been greater than any subsequent reaction in all cases where I have tried it, except one, and in that case the temperature was never any lower than at the height of the reaction after the first dose. I shall, however, give a more detailed account of this case further on.

I have used the new tuberculin in cases of bone tuberculosis, tuberculosis of the bladder and in laryngeal and pulmonary tuberculosis, as well as in some cases of local tubercular disease of the skin. So far it has never failed me in bringing about the expected reaction, except in the cases where I used it which proved to be not of a tuberculous nature. Cases in which there was ulceration of the bladder with haematuria, pus, mucus, and the attendant symptoms of a cystitis, which symptoms were persistent, even after dilating the urethra and practicing curettage, a tuberculin hypodermic was administered in six mg. dose, the characteristic reaction occurred, and the patients felt relieved after four or five days.

The remedy was then kept up for several weeks, using it for three or four days in gradually increasing doses daily; then leaving it off for about the same period, when it was resumed with the maximum dose of the previous period of administration, increasing gradually during this next period of three or four

days. The elevated temperature and the symptoms on the part of the bladder were relieved to a far greater extent than had been attained from any other treatment in both the cases under observation. It is but just to say that these cases are of too recent observation to make a report upon which we would base an opinion as to a permanent therapeutic result.

A pulmonary tuberculosis where the diagnosis was confirmed by a microscopic examination, and where there was supra-clavicular dullness as well as slight infra-clavicular recognizable diseased tissue, tuberculin was used in a test dose whereupon there was a decided reaction, which lasted for three days. After this subsided the patient was at once put upon the therapeutic dose, beginning with one-eighth mg. and increasing one-twenty-fourth mg. every other day for one week. The night sweats were reduced to a minimum; the cough was gradually lessened, and, in general, the patient was much improved. A week was then allowed to pass without any further injection, at which time they were resumed at the maximum dose of the preceding period and kept up for two weeks, increasing gradually as before, which, as you will observe, was the end of four weeks from the beginning of this treatment; the symptoms had gradually cleared up, the temperature in the afternoon never being more than one-half degree above normal, the night sweats having entirely disappeared, appetite increased, and no cough of any consequence, or, as the patient said, "no cough at all."

This case did not have good hygienic surroundings, and, after another month had elapsed, there was beginning evidence of the unpleasant return of symptoms. He was again put upon tuberculin, beginning this time with one mg. dose, and increasing gradually until it had reached 3 mg. bi-daily. There then appeared to be almost complete relief from the unpleasant symptom and within the next three days a nephritis developed, which passed through the acute stage, when the patient again seemed measurably well; but after a few days a double pleurisy developed, with an effusion in both chests. As the patient objected to an aspiration, the case passed from my observation and has not since been seen, and so far I have been unable to obtain a report of his condition for the past three months. This is the only case where I have found any renal effect following the administration of tuberculin.

Another case, giving history of a pleuritis of both sides, was seen during the month of August. This patient had the characteristic dullness above the left clavicle, increased fremitus, fine crepitation, prolonged expiration and accelerated vocal sounds. Microscopy failed to establish a diagnosis of tuberculosis; but a seven mg. dose of tuberculin brought the characteristic reaction. After a week the case was about as when first

seen. The pleuritic inflammation had not left any effusion worthy of note. The other symptoms were clearly indicative of pulmonary tuberculosis. The patient was then put upon one-tenth mg. every other day, and at the end of one week there was marked improvement. Then the dose was ordered to be increased one-thirtieth mg. bi-daily. At the end of the next week, or two weeks after the beginning of treatment, the temperature never reached higher than 99.4; the circulation was never above 90. The night sweats had measurably ceased.

This case, after a month, was still under observation, but the symptoms had become more aggravated, notwithstanding that tuberculin was diligently used therapeutically. I advised this patient to change climates and continue the use of tuberculin. She now has gone to Colorado.

I desire to report another case, for the record of which I am indebted to my friend, Dr. W. S. Reeves, of Wyoming, Ky.:

Mrs. R.; aet. 27; married. Mother of three children, all healthy. Was first seen March 22, 1898. Gave history of a cough two months preceding, with little or no expectoration; breathing slightly accelerated; circulation 100; temperature 99.5. A careful examination of the chest was negative. There was very little change in the patient's condition for the following two months. She gradually lost flesh; circulation kept from 100 to 120; temperature from 99 to 100; anorexia persisting. Acute miliary tuberculosis was diagnosed, and tuberculin, five mg., was administered May 28. The reaction was marked, temperature increasing to 104.5, with vomiting and nervous symptoms. Afterward, when the temperature had fallen to 100, tuberculin was again administered in the same dose; this time it reached 105, with nervous symptoms, but no vomiting. Following each test dose the circulation would be 120 or above; the temperature would go higher, but never reach the minimum which existed at the end of the reaction after the first dose was administered. The patient continued to lose flesh, and had a continued elevated temperature, with constant cough and slight expectoration. Two weeks after the first test dose the therapeutic doses were commenced, and one-tenth mg. was given and increased every second day one-fifteenth mg.; this was kept up until one mg. was reached, and as the reaction was so marked after each dose it was abandoned, and the patient gradually succumbed from a rapid infiltration of pulmonary tissue. This is the only case that it has been my opportunity to see that did not improve at some time under the use of tuberculin.

I have purposely refrained from using it in any case of advanced pulmonary disease.

I would conclude:

First—That tuberculin is of inestimable value in diagnosing tuberculosis in early stages.

Second—It is of equal value in discriminating between this affection and others which closely simulate it.

Third—In some cases of beginning tuberculosis it is a remedy which possesses curative powers.

Fourth—In tuberculous glands and in local skin tuberculosis the diseased condition is at once usually relieved. Its greatest value at this time I believe to be *is its use as a diagnostic means.*

I have endeavored in this to refer only to matters of practical value, and to leave theorizing for those who have more time for theory than for practice.

ABSTRACT OF PAPER—

THE DIAGNOSIS OF GONORRHOEA IN WOMEN.

By JOSEPH RILUS EASTMAN, M.D.,

Indianapolis, Indiana.

There is no malady to which womankind is liable that should engage more consideration than gonorrhœa. Strewn in the train of its ubiquitous and wily germ are pathologic ravages of surpassing import in their clinical and moral consequences, yet hardly recognized or understood. Sinclair observed a decade ago a strange indifference toward differential diagnosis of gonorrhœa in the female, and even now, when in the light of recent bacteriology it is easily possible to demonstrate the gonococcus in the act of pathologic mischief, there exists a notable, if not notorious, tendency on the part of most general practitioners and some specialists to disregard in doubtful cases discriminating diagnosis.

The diagnosis of acute gonorrhœa in women is comparatively easy, even without the microscope. What with a history of impure coitus, free purulent secretion from vulva, vagina and urethra; intertrigo, burning on micturition and vesical tenesmus, the diagnosis is not far to seek. Upon inspection one usually detects a discharge of tenacious pus, or greenish or yellowish streaks upon the linen may alone be in evidence. Erosion may be present upon the skin, upon the labia, majora, or in the inguinal and gluteal folds. The labia minora, the clitoris and its prepuce, and the hymen, if present, are red and swollen. The meatus urinarius is found to be congested and ectropic, its normal pink color changed to a deep red. The

mouths of the ducts of the Bartholinian vulvo-vaginal glands are deeper in color, gaping and tender. They discharge instead of their normal glycerine-like secretion, pus-laden mucus. A small area of mucosa immediately about these openings exhibits a purplish red nuance. The surface of the vagina proper presents no great change, the adult vaginal mucosa being practically uninfluenced by the presence of the gonococcus, not for the reason generally presented, namely that the germ can not exist upon flat epithelium, but more probably because (as Doederlein has pointed out) of an acid environment and the presence of the vaginal bacillus.

It is certain beyond cavil that the gonococcus can grow fat upon flat epithelium. Rosinski reported five cases of gonorrhœa of the mucous membrane of the mouth in the new born, and specific vaginitis in children is by no means rare. It occurs so often in plural instances among the children of the same household in Germany that the term "glückliche familie" has obtained general currency as a technical expression of the craft. The so-called "happy family" is one in which the father, mother and all of the children are simultaneously ill with clap.

A comprehensive examination of the discharge is not complete until the secretion of the urethra, Skene's lacunæ, the glands of Bartholin, the vagina and cervix, have been searched through, and in chronic cases several preparations should be made from each of these.

Before each act of removing discharge for examination, the vulva and the vestibule should be rinsed with warm, sterile water and dried with cotton pledgets. The secretion of the urethral mucosa, this being the germ's favorite habitat, is generally sought first. The universal method of securing it is by milking the tract with the finger in the vagina, stroking gently from the vesical opening to the orificium externum. If specific urethritis without discharge be present, nitrate of silver will generally bring the diplococci from the deeper layers. The urethra being emptied, any secretion present in Skene's glands may be evacuated by stroking with two fingers astraddle the urethra. The vulvo-vaginal glands will evacuate their discharge if compressed between the thumb and fore-finger.

To secure unmixed gonorrhœal pus from the cervix uteri, care should be taken that the platinum wire does not come into contact with the vagina or portio. It is best to first rinse, and then dry the vagina with cotton to free it of mucus.

It is not to be assumed that because the bacteria are intra-cellular that they are therefore gonococci, for it is certain that other diplococci than those of gonorrhœa lie within the cell protoplasm. Moreover, the writer has seen preparations in which the unmistakable gonococci lay altogether without the

cells. The most distinguishing characteristic of the gonococcus as stained by the Pick method, according to Broese and Schiller, are the deep blue color, the biscuit or coffee bean form, and their superior size.

The gonococcus is an exceedingly large diplococcus, averaging one and one-half micro-millimeters in length and three-fourths micro-millimeters in breadth.

It will be concluded after many examinations for gonococci that the urethra is the predilection seat of gonorrhœa in women, and that the vulvitis and vaginitis are secondary, being caused by the bathing of these parts with the discharge from the urethra and cervix. Vaginitis and vulvitis are rarely seen in cleanly women, according to Bumm.

In many cases of endo-cervicitis, endo-metritis and salpingitis gonorrhœica, the clinical picture of gonorrhœa is complete, and yet the most skilful attempts to run down the gonococcus are futile. An adequate explanation of this paradox has been given us by Wasserman. He has shown that the gonococcus produces an active, specific poison. The poison is contained within the substance of the gonococcus itself. The poison remains active after the death of the germ. A very small amount of this poison, if injected under the skin, produces inflammation at the point of application, fever, swelling of the neighboring lymphatic glands and pain in the muscles and joints. Wasserman sought to find whether there is any immunity against this poison, with a negative result.

With these facts in mind, many dark places in the symptomatology of gonorrhœa become more clear. It is not impossible to explain by this token blenorrhagic rheumatism after the gonococci have entirely disappeared. Moreover the peculiar symptomatology of chronic gonorrhœal inflammation of the female genital apparatus becomes clearer. Remembering that the gonococcus is aerobic and does not multiply under exclusion of oxygen, on the other hand, very soon dies under this condition, the picture becomes still clearer.

The cocci may become encapsulated and cut off from the circulation in an old exudate and die off, but at their death and disintegration the inflammation and fever-producing poisons are set free. If they are absorbed, fever results; if they remain localized the local inflammatory process continues, perhaps indefinitely, since the organism can not immunize itself.

We have seen that the diagnosis of acute gonorrhœa may be made by contemplation of the clinical phenomena alone; for example, if acute urethritis be present, we are almost certain that the gonococcus is to blame. A few days' observation will establish the diagnosis beyond conjecture, since the symptoms of non-specific urethritis will disappear rapidly. In chronic

gonorrhœa, however, too much dependence upon clinical manifestation is hazardous. Condylomata are often present, but appear also often independently of gonorrhœa. Debris-laden discharge from the vulvo-vaginal glands is usually an expression of old gonorrhœa, but other germs, as the staphylococcus aureus and saprophytic forms, may occasion just such discharge. Among the more common indications of chronic gonorrhœa are the maculæ gonorrhœicæ of Sanger, red papules about the openings of the vulvo-vaginal glands, sclerotic inflammation of these glands, in which the glands are felt as hard, non-sensitive nodules under the examining finger, cysts of these glands and scars and erosions in the vulva. To these may be added the colpitis maculosa and granulosis. All of these conditions may be caused by others germs than gonococci. Here, as in acute gonorrhœa, the most reliable indication is the urethritis.

(ABSTRACT.)

COMPLETE INSPECTION OF THE RECTUM
BY MEANS OF NEWER MECHANICAL CONTRIVANCES.*

By THOS. CHAS. MARTIN, M.D.,

Teacher of Proctology in the Cleveland College of Physicians and Surgeons,
Cleveland, Ohio.

The newer mechanical means exhibited consisted of a set of proctoscopes, which are provided with obturators of peculiar form; of an illumination apparatus susceptible of adjustment to an infinite number of positions, and of an improvement on the Yale chair, which facilitates the placing of the patient in the knee-chest posture without requiring any movement on the part of the patient after he is properly seated on the chair. The improvement consists essentially of an upholstered board attached to the left arm of the chair and a mechanism controlled by a crank and lever which form a part of the running gear. The anoscope exhibited is one centimeter in length and is designed for the inspection of that part of the rectum which is surrounded by the pelvic floor. The proctoscope is ten centimeters long, which the essayist claims is of sufficient length to reach into the inflatable rectum and is not of so great a length as to obstruct a complete view of the rectal chambers, and yet is of sufficient length to reach the promontory of the sacrum

* Read at a Meeting of the Mississippi Valley Medical Association, Nashville, Tenn., October 10-14, 1898.

when the pelvic floor is displaced upward by the proctologist's manipulations. Both of these instruments are two centimeters in diameter, this diameter having been determined upon as the result of calibration in many normal ani. The average diameter of the instrument is equal to the degree of painless expansibility of the anus. The obturators have contracted necks which constitute these instruments' ointment applicators. The middle part of the obturator is channeled; this qualifies the instrument as a nozzle for rectal irrigation; because of its contracted neck the obturator may be used as a self-retaining nozzle. The surface of each obturator is fluted in such a manner that it may be used as a two-way irrigator when properly fixed within its tube. The technic of the inspection is as follows: The patient is required to sit on the chair with his legs crossed and his body facing the knee-board which is attached to the left arm of the chair. The chair back is changed to the horizontal by a movement which puts the patient into the Sims posture. The fixed rectum is now examined by means of the short anoscope. After this portion of the rectum is inspected the chair's lever is extended, its crank turned and the chair tilted to such an extreme degree of the oblique lateral position that the chair seat is almost perpendicular and the knee-piece, which is a part of the left arm of the chair and against which the patient's knees are pressing, is almost horizontal. Now, at a time when the patient is resting easily in a position which is equivalent to the knee-chest posture, the proctoscope is introduced, the obturator withdrawn, and the inspection of the ballooned gut completed. The patient is returned to his feet by executing in the reverse order the several steps of this procedure.

1077 Prospect street.



(SYNOPSIS.)

HYDROTHERAPY IN DISEASES OF THE STOMACH.*

By GEO. D. KAHLO, M.D.,

Indianapolis, Indiana.

In the treatment of diseases of the stomach, water ranks first among all our therapeutical resources. Cold water is more stimulating to the secretions and is a better laxative than hot. Hot water has a greater influence as a diaphoretic, is more soothing to the gastric mucous membrane, is a better solvent and is more generally applicable as a remedial agent. The condition in which the drinking of hot water is attended with the greatest benefit is chronic gastritis, but its use in this way must be limited to those cases in which the motor function is intact. It should be administered in quantities of from eight to sixteen ounces one hour before each meal and at bed time. Should be taken as hot as can be borne with comfort and sipped very slowly. It may be used with almost equal benefit in functional conditions associated with normal motor activity. Mineral waters of feeble concentration have about the same influence as the ordinary potable water, but the effects of the stronger waters are dependent upon their chemical constituents. Acidulous and saline waters are indicated in conditions in which there is diminished secretion, as are also alkaline waters in small quantity. The stronger alkaline waters are most useful in hyperacidity and gastric ulcer. Sulphated waters are of benefit in the treatment of constipation. Lavage is indicated in the conditions in which the drinking of water is contra-indicated. In dilatation it is a sovereign remedy. Weak salt solutions are to be recommended when there is diminished secretion and bicarbonate of soda solutions in hyperacidity. The best means for the employment of antiseptics is by the gastric spray, as there is less danger from absorption. Externally, cold applications are indicated in acute gastritis and in the control of hemorrhage and vomiting. Hot applications should be employed in gastralgia, hyperæsthesia and chronic gastritis. The Scottish douche is of benefit in neurotic conditions. The essential factors governing a successful hydrotherapy are an exact diagnosis, a thorough knowledge of the causative influences and of the effects of the remedial agent, as also the confidence and coöperation of the patient.

* Presented at the Meeting of the Mississippi Valley Medical Association, Nashville, Tenn., October 12, 1898.

(ABSTRACT.)

THE EARLY DIAGNOSIS OF CARCINOMA OF
THE UTERUS.*

By THOMAS S. CULLEN, M.D.,

Associate in Gynecology in the Johns Hopkins University,
Baltimore, Maryland.

Dr. Cullen spoke on "The Early Diagnosis of Carcinoma of the Uterus," saying that this was the direction in which we must turn to stay the progress of this dread disease.

Histology of the Normal Uterus.

The speaker briefly ran over the the normal histological appearance of the uterine mucosa:

(a) The squamous epithelium covering the vaginal portion of the cervix, usually ending at the external os but not infrequently extending to a point midway up the canal or even as far as the internal os.

(b) The cervical epithelium which usually extends from the external to the internal os. This is very high and cylindrical; its nuclei are usually situated on the basement membrane, and are triangular, oval or elongate. The form appears to depend upon the amount of secretion contained in the cell. The cell protoplasm is very pale and tends to imbibe the hæmatoxylin stain instead of cosin. The racemose glands of the cervix may be looked upon as branching reduplications of the surface epithelium; their cylindrical epithelium is identical and continuous with that covering the surface of the canal. The stroma around the cervical glands is usually rather dense but offers nothing very distinctive.

(c) The uterine mucosa commences at the internal os and lines the entire uterine cavity. It is usually 2-4 m. m. thick, is smooth, and has a surface covering of one layer of cylindrical epithelium. These cells are barely two-thirds as long as those of the cervix, have oval nuclei which are situated some distance from the base of the cell or lie near the middle, and contain a protoplasm which takes the eosin stain; attached to their surface are cilia. Thus the cervical epithelium differs in almost every particular from that of the body. The uterine glands are tubular and may branch slightly near the muscle; they are lined by one layer of epithelium, continuous with and similar to that covering the surface. This epithelium usually contains several

* Address delivered at Birmingham, Alabama, October, 1898.

nuclear figures. The tissue between the glands we usually call the stroma of the mucosa. The nuclei of this are oval and vesicular, the cells are usually spindle-shaped and can be studied to best advantage where they are separated from one another as in edema. A few small round cells are regularly found between the stroma cells. The blood supply of the stroma is rather interesting; the arteries are invariably in small bunches of from three to eight and are surrounded by considerable connective tissue. The veins are large and merely have their endothelial lining separating them from the stroma.

The speaker laid especial stress on the necessity of a thorough knowledge of the normal appearances before one undertakes to study early pathological changes, as in some cases the alteration of a few cells to one thoroughly familiar with the normal appearance is sufficient to enable him to make a diagnosis. The classification of carcinoma has been rather complicated, and, to a great extent, indefinite. Cullen, from a systematic examination of over ninety cases in the Johns Hopkins hospital and from a critical review of the literature, has made the following simple classification:

- (a) Epithelioma of the cervix.
- (b) Adeno-carcinoma of the cervix.
- (c) Adeno-carcinoma of the body of the uterus.
- (d) Epithelioma of the body of the uterus (rare).

From this classification it is readily seen that varieties (a), (b) and (c) correspond to the three varieties of epithelium found in the uterus and which have already been described.

The epithelioma, as known to all, commences in the squamous epithelium, starts as small papillary outgrowths and finger-like or branching ingrowths. It is just when the disease is in its earliest stage that we wish to recognize it. Given a patient over thirty-five, complaining of a slight bloody or watery discharge between menstrual periods, insist on making or having an examination made. If the cervix show localized hardness, blue on slight manipulation, and have little masses springing from its surface, the diagnosis is fairly certain, but if one be in doubt a small wedge-shaped piece should be cut out of the suspicious area and examined at once.

In adeno-carcinoma of the cervix the process is much more insidious, the patient perhaps complaining of the slight bloody or watery discharge. On vaginal examination frequently nothing can be detected. Cullen at this point exhibited a specimen of adeno-carcinoma of the cervix where the disease occurred midway between the external and internal os. The diagnosis was made from scrapings. Dr. Kelly, on examining the specimen after abdominal hysterectomy, did not for a moment think that it was carcinoma, but said that the operation had been

warranted on account of the large pus tubes; and Dr. Welch, when two uteri were placed before him, said he could not determine either by appearance or by manipulation which was the diseased organ. On cutting the uterus open, the carcinomatous nodule was instantly recognizable. In such a case, when even with the uterus before one, the diagnosis is impossible, how much less likely is one able to arrive at a proper conclusion when making a bimanual examination. The only accurate means of diagnosis was by the aid of the microscope.

In adeno-carcinoma of the cervix, the growth may commence from the epithelium lining the canal, as beautifully shown in one of Cullen's drawings; here the surface epithelium had rapidly proliferated and formed large masses of cells which were, to a great extent, arranged as new glands, but as yet there was no connective tissue between the glands, a condition that speaks conclusively against Ribbert's recently advanced view, that the carcinoma is primarily due to a ripping off of epithelium by the underlying stroma.

Adeno-carcinoma of the body of the uterus is much more frequent than was formerly supposed. In the early stages the symptoms are usually only a slight bloody or watery discharge, and on a bimanual examination one finds the uterus little, if any, enlarged, hence without further aids in diagnosis the true condition could not be accurately determined. Before curetting such a uterus it is well to bear in mind that while at times the mucous membrane of the entire cavity is involved in the new growth, frequently the process is limited to one wall or even to a small portion of one wall, hence if the operator curette at random and not in a systematic way, the diseased area may not be disturbed at all, only normal tissue from the surrounding portions being removed; it is, therefore, always wise to thoroughly curette the walls anteriorly, posteriorly and laterally. If carcinoma be present the curettings are usually abundant, the surface of the mucosa has a branching or tree-like appearance instead of the normally smooth and velvety covering, and the tissue is very friable. Histologically the carcinoma is very readily diagnosed from even the smallest amount of tissue, and then from the characteristic gland formation. The widespread idea that the glands must be seen penetrating the muscle is erroneous, as not in one case out of ten do we find uterine muscle in the scrapings, and yet the diagnosis is clear. The speaker demonstrated numerous illustrations of gross specimens of adeno-carcinoma of the body of the uterus, diagnosed from scrapings and then exhibited microscopic sections showing the earliest possible change in the uterine glands. One case was particularly instructive. A patient giving vague signs of carcinoma of the body was curetted by Dr. F. R. Eccles, of Lon-

don, Canada, curettings were examined by Cullen and diagnosed as carcinoma. The uterus was subsequently removed and the carcinomatous area, situated near the right uterine, was not more than half an inch in diameter; although small, it had eaten half way through the muscular substance. This case gave gradations from normal to typical carcinomatous glands.

Epithelioma of the body of the uterus is exceedingly rare, probably not more than six or seven cases having been reported. This variety is identical with epithelioma of the cervix and it is most likely due to the squamous epithelium having extended abnormally far upward.

The clinical phenomena of carcinoma of the uterus are not satisfactory, so many of those present being common to other diseases. The presence of a bloody or watery discharge should always arouse one's suspicion and stimulate him to make an immediate diagnosis.

Prognosis—Adeno-carcinoma of the cervix is undoubtedly the most malignant. Epithelioma of the cervix is next in the category, while adeno-carcinoma of the body is most amenable to treatment.

The treatment in the early cases is, of course, complete enucleation. It is interesting to note the advance in this line. First we had the amputation of the cervix as practiced by Schröder and others, then hysterectomy as recommended by Freund in 1878; later a distinct advance was made when Pawlich in 1889 recommended catheterization of the ureter preparatory to removing the uterus. This was not, however, adopted by the profession at large, and it remained for Kelly, who conceived the idea independently, to establish it as a routine procedure. Recently a further step has been taken. This was independently advocated by Reis, Clark and Rumpf. The operation as performed by Clark and Reis leaves little to be added in this direction, and yet where the disease had advanced far none of these operations are of permanent benefit. Our only hope lies in the early diagnosis.

Recapitulation.

1. Carcinoma of the uterus is divisible into four varieties:
 - (a) Epithelioma of the cervix.
 - (b) Adeno-carcinoma of the cervix.
 - (c) Adeno-carcinoma of the body.
 - (d) Epithelioma of the body (rare).
2. The diagnosis in the early stages can not, as a rule, be made without the aid of a microscope.
3. The changes in carcinoma are so characteristic that a histological examination will invariably allow one to make the diagnosis.
4. Our chief hope lies in the early diagnosis, as in the later stages no operation can avail.

(ABSTRACT.)

A FEW PRACTICAL POINTS IN THE TREATMENT
OF POSTERIOR URETHRITIS.*

By A. RAVOGLI, M.D.,

Cincinnati, Ohio.

The author stated that the greatest advance in the treatment of gonorrhœa has been achieved by the school of Breslau through the studies of Albert Neisser. The principle rests on the base of destroying the gonococcus as quickly as possible. The often repeated injections, or better, the irrigations of the urethra, have been employed to obtain this result. He mentioned the irrigations first applied by Halsted in the Roosevelt hospital with solutions of bichloride of mercury in strength from 1 to 100,000, to 1 to 10,000. In these irrigations he has been rather disappointed, and although the patients did not complain of any discomfort during the act of irrigating, they were seized afterwards by pain, vesical tenesmus, increased inflammatory symptoms, and in three cases epididymitis soon resulted, so that he has abandoned this method.

He pointed out that the most important point for the treatment of the posterior urethra was to reach the whole surface of this region. The ordinary syringe used by the patient does not carry the fluid further than the bulb, and the ordinary injection, if good for an anterior urethritis, is of no benefit for the posterior. The compressor urethræ muscle with its contraction prevents the introduction of any fluid into the posterior urethra, and for this reason Ultzmann advised a method of irrigation with dilute solutions by means of a short catheter. He, however, had already spoken of the possibility of forcing a fluid into the bladder along the urethra, without the use of a catheter, by overcoming the contraction of the cut-off muscle.

The author showed the origin of the irrigating method of Janet from the possibility of overcoming the contraction of this muscle. He considers the Janet method another progressive step in the treatment of gonorrhœa. The fluid used in the Janet irrigator is a permanganate of potassium solution at different strengths, from 1 to 5,000, to 1 to 1,000. He refers to several authors who consider the Janet method not only very beneficial, but as an abortive means for this disease.

He dwelt on the description of the Janet apparatus and on the way of applying it in order not to produce much disten-

* Read at the Meeting of the Mississippi Valley Medical Association, Nashville, Tenn., October, 1898.

sion of the urethra, which sometimes is painful and uncomfortable. For this reason he recommends at the first application not to close too tightly the meatus of the urethra, letting some of the fluid flow back, and to close tightly the meatus when the contraction of the muscle is overpowered and the fluid runs back into the bladder.

For the irrigations of the posterior urethra, the author prefers to irrigate it through a recurrent catheter, avoiding the filling up of the bladder with the fluid and the distension of the anterior urethra. He presented a catheter of his own design, made by Max Woche & Co., of Cincinnati. It consists of a double catheter, having the Beniqué curve. One is superior and ends in a bulb perforated with holes for more than two inches in its length; the inferior catheter begins with one groove posterior and two lateral. Just at the beginning of the curve and at the maximum of the curve the grooves end in three holes, which receive the fluid from the posterior urethra and carry it away. By this means he maintains that the fluid washes the posterior urethra thoroughly without filling the bladder, and is then taken by the recurrent branch of the catheter at the place where the compressor urethræ forms the boundary between the anterior and posterior urethra.

This catheter is used by letting the patient stand in an erect position, the superior branch being attached to the nozzle of the Janet apparatus by a rubber tube, and in this way the posterior urethra is irrigated for five to ten minutes.

The fluid is a solution of permanganate of potassium freshly prepared, which he considers one of the best antigonorrhœal remedies, on account of its highly oxidizing power.

He has found these irrigations very soothing for the patient, and they never cause irritation or unpleasant feeling.

In subacute cases, after the irrigation of the urethra with the permanganate solution, he injects through the same catheter a solution of protargol from 1 to 400, to 1 to 100.

In inveterate cases associated with infiltration of the submucous tissues, he recommends the introduction of a fenestrated sound, with a salve, 25 per cent. of ichthyol in vaseline.

He spoke of the antigonorrhœal property of the protargol and of the reducent action of the ichthyol on the infiltrated tissues.

He added statistics of sixty cases treated by this method, in which he obtained recovery in from two to four weeks.

He also pointed out the fact that under this treatment no complications occurred, and in some cases, where the patients suffered with relapsing epididymitis, the epididymitis was greatly benefited by the irrigations in the posterior urethra.

Relapses occur in 20 per cent. of cases, mostly caused by indiscretions.

The essayist spoke of the use of the balsams, which he considers to be relegated to the times of the past. He does not deny a certain benefit from the administration of copaiba and of santalwood on the catarrhal condition of the mucous membrane of the urethra, but this benefit is accompanied by a great many inconveniences. These remedies have no action on the gonococci, which vegetate in the urine containing balsams. So that the only benefit from the balsams is to render the urine aseptic, but they have no antibacterial property.

He concluded by stating that his purpose was to give to the general practitioner an easy and handy method of treating posterior urethritis, in order to avoid late troublesome consequences. He recapitulated in brief the principles of the treatment of posterior urethritis as follows:

First—Irrigations by the Janet method in a recent case of gonorrhœa will in many cases prevent posterior urethritis.

Second—Irrigations with the recurrent catheter, with permanganate of potassium, followed by injections of protargol, will cure in a relatively short time a case of subacute posterior urethritis without complications.

Third—When chronic posterior urethritis lasting for a long time has caused infiltration of the submucous tissues, the application of a sound with ichthyol salve gives the desired results.

SURGICAL CONVALESCENCE, WITH REPORT OF BLOOD COUNT IN TWENTY CASES.

By STUART McGUIRE, M.D.,

Professor of Principles of Surgery in the University College of Medicine; Surgeon to
St. Luke's Hospital, and the Virginia Hospital,

Richmond, Virginia.

Several months ago I received a visit from an agent of the M. J. Breitenbach Company of New York, manufacturers of Gude's Pepto-Mangan, who stated that his firm was anxious for me to test their preparation on surgical cases and to publish the results. I agreed to do so, provided I be allowed to utilize the first twenty major cases on which I operated, and that his company supplied me with the drug and paid the cost of the necessary blood counts.

I append a report of twenty cases. Eleven of them were private patients at St. Luke's Hospital, and nine were clinic cases at the Virginia Hospital. The histories are taken from official records,

augmented by the blood counts made by Dr. M. D. Hoge, Jr., Professor of Pathology in the University College of Medicine.

When it is remembered that the patients were all confined to bed; that they were recovering from the effects of serious surgical operations, and that they were subjected to the depressing influence of hospital life, the average increase of red blood corpuscles is remarkable. Had the cases been selected, and only anaemic patients tested, the results would have been showier.

CASE I.—Miss E. G., aged 20; patient St. Luke's Hospital. Struck on back by windlass of well, four months prior to admission. Laminectomy and removal of carious bone and clotted blood. Gave Gude's Pepto-Mangan 60 days. First count, 1,500,000 red corpuscles to the cubic millimetre. Second count, 3,300,000 to the cubic millimetre. Rapidly improving, and recovery assured.

CASE II.—Mrs. M. K., aged 29; patient St. Luke's Hospital. Cystic disease of ovaries and chronic inflammation of the appendix. Double Beattie-Tait, and appendectomy. Gave Gude's Pepto-Mangan 20 days. First count, 3,950,000 red corpuscles to the cubic millimetre. Second count, 4,000,000 to the cubic millimetre. Discharged well.

CASE III.—Miss C. H., aged 22; patient St. Luke's Hospital. History of frequent attacks of hepatic colic—no jaundice. Opened the gall-bladder and removed a calculus one inch in diameter. Gave Gude's Pepto-Mangan 28 days. First count, 3,940,000 red corpuscles to the cubic millimetre. Second count, 3,900,000 to the cubic millimetre. Bile still escaping from fistula, but patient otherwise well.

CASE IV.—Miss A. N., age 32 years; patient St. Luke's Hospital. History of sudden peritonitis, accompanied by profound sepsis. Exploratory incision revealed a pedunculated fibroid tumor of uterus, gangrenous from twisted pedicle. Myomectomy. Gave Gude's Pepto-Mangan 36 days. First count, 3,800,000 red corpuscles to the cubic millimetre. Second count, 4,000,000 to the cubic millimetre. Good recovery.

CASE V.—Miss E. J., aged 17; patient St. Luke's Hospital. Spinal irritation from a fall. Anaemic, emaciated, and confined to bed for more than a year from contraction of ham-string muscles. Electricity, massage and passive movements. Gave Gude's Pepto-Mangan 40 days. First count, 3,500,000 red corpuscles to the cubic millimetre. Second count, 4,425,000 to the cubic millimetre. Her menses, which had been suppressed, became regular. She fattened 20 pounds, and left the hospital walking with a cane.

CASE VI.—Miss T. B., aged 21; patient St. Luke's Hospital. Retroverted uterus, bound down by adhesions. Opened abdomen,

freed organ and stitched it to anterior abdominal wall. Gave Gude's Pepto-Mangan 30 days. First count, 3,900,000 red corpuscles to the cubic millimetre. Second count, 3,950,000 to the cubic millimetre. Complete relief from symptoms.

CASE VII.—Master D. S. J., aged 9; patient St. Luke's Hospital. Acute suppurative osteomyelitis of femur, tibia and tarsus on one side and of tibia and tarsus on the other. Amputated one limb and used chisel and curette on the other. Gave Gude's Pepto-Mangan 45 days. First count, 3,720,000 red corpuscles to the cubic millimetre. Second count, 4,600,000 to the cubic millimetre. Patient discharged with well healed stump, but incision in ankle still draining.

CASE VIII.—Mrs. H. E. W., aged 48; patient St. Luke's Hospital. Carcinoma of cervix; vaginal hysterectomy by clamp method. Had a bad liver and an irritable stomach, and though Pepto-Mangan was tried in varying doses, and at different times during convalescence, she was never able to take it for more than a day or two consecutively. First count, 3,400,000 red corpuscles to the cubic millimetre. Second count not made. Case made a slow recovery, but is now well.

CASE IX.—Master R. G., aged 14; patient St. Luke's Hospital. Compound depressed fracture of skull from a three-pound mass of type metal falling five stories. Trephined and removed blood clot and spiculae of bone. Gave Gude's Pepto-Mangan 21 days. First count, 3,900,000 red corpuscles to the cubic millimetre. Second count, 3,800,000 to the cubic millimetre. The loss was less than anticipated, as the boy was injured while in vigorous health. Recovery rapid and complete.

CASE X.—Miss A. E. S., aged 27; patient St. Luke's Hospital. Indigestion, constipation and dysmenorrhoea. Rapid dilatation of cervix. Gave Gude's Pepto-Mangan 34 days. First count, 3,900,000 red blood corpuscles to the cubic millimetre. Second count, 4,400,000 to the cubic millimetre. Bowels became regular, menstruation painless, and strength and weight increased.

CASE XI.—Mrs. W. A. M., aged 29; patient St. Luke's Hospital. Symptoms of long-existing ovarian and uterine trouble, to which had recently been added those of inflammation of the appendix. On section, the uterus was found retroverted, the ovaries cystic, the appendix impacted and adherent, and the intestines filled with lumbricoids. The uterus was righted and stitched to the anterior abdominal wall, the ovaries and appendix removed, and later a brisk purgative expelled the worms. Gave Gude's Pepto-Mangan 18 days. First count, 4,200,000 red corpuscles to the cubic millimetre. Second count, 4,310,000 to the cubic millimetre. Recovery and complete relief from symptoms.

CASE XII.—Mrs. L. A. W., aged 44; patient Virginia Hospital. Carcinoma of breast, with extensive lymphatic involvement. Radical extirpation of disease. Gave Gude's Pepto-Mangan 10 days. First count, 4,550,000 red corpuscles to the cubic millimetre. Second count, 4,620,000 to the cubic millimetre. Case discharged in two weeks and not heard from since.

CASE XIII.—Mrs. L. J., aged 25; patient Virginia Hospital. Pyosalpinx, following puerperal septicaemia. Opened abdomen, freed numerous intestinal adhesions, enucleated pus tubes, and removed uterus by Baer's method. Gave Gude's Pepto-Mangan 28 days. First count, 3,410,000 red corpuscles to the cubic millimetre. Second count, 4,100,000 to the cubic millimetre. Perfect recovery.

CASE XIV.—Master J. F. S., aged 11; patient Virginia Hospital. Tuberculosis of the knee and femur, with secondary infection and profuse suppuration. Amputation. Gave Gude's Pepto-Mangan 24 days. First count, 4,005,000 red corpuscles to the cubic millimetre. Second count, 4,300,000 to the cubic millimetre. Rapid recovery and marked constitutional improvement.

CASE XV.—Miss A. H., aged 25; patient Virginia Hospital. Diseased ovaries and retroverted uterus. Double ovariectomy and ventro-suspension of uterus. Gave Gude's Pepto-Mangan 30 days. First count, 4,300,000 red corpuscles to the cubic millimetre. Second count, 4,200,000 to the cubic millimetre. Patient a hypochondriac and still complains.

CASE XVI.—Mrs. E. B., aged 36; patient Virginia Hospital. Cirroid aneurism of scalp and forehead, causing agonizing pain from involvement of orbit. Ligation of right common carotid artery. Gave Gude's Pepto-Mangan 16 days. First count, 4,400,000 red corpuscles to the cubic millimetre. Second count, 4,100,000 to the cubic millimetre. Force of pulsation diminished and pain completely relieved.

CASE XVII.—Mr. P. S., aged 51; patient Virginia Hospital. Suppurative osteomyelitis of tibia. Amputation of limb. Gave Gude's Pepto-Mangan 28 days. First count, 3,400,000 red corpuscles to the cubic millimetre. Second count, 3,700,000 to the cubic millimetre. Recovery, with marked improvement in general health.

CASE XVIII.—Miss N. C., aged 30; patient Virginia Hospital. Rapidly growing fibroid tumor of uterus. Complete hysterectomy and removal of mass weighing forty pounds. Gave Gude's Pepto-Mangan 30 days. First count, 3,700,000 red corpuscles to the cubic millimetre. Second count, 3,750,000 to the cubic millimetre. Intercurrent attack of pneumonia, which retarded recovery and interfered with the regular administration of medicine.

CASE XIX.—Mrs. S. S., aged 50; patient Virginia Hospital. Carcinoma of breast. Amputated organ and dissected out adjacent

lymphatic glands. Gave Gude's Pepto-Mangan 10 days. First count, 4,200,000 red corpuscles to the cubic millimetre. Second count, 4,250,000 to the cubic millimetre. No report from case since discharge.

CASE XX.—Mrs. J. S., aged 31; patient Virginia Hospital. History of three acute attacks of appendicitis. Thin, anaemic and nervous. Appendectomy. Gave Gude's Pepto-Mangan 26 days. First count, 2,644,000 red corpuscles to the cubic millimetre. Second count, 3,950,000 to the cubic millimetre. Gained fifteen or twenty pounds in weight and is completely well.





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EDITORIAL DEPARTMENT.

Fees for Referring Patients to Consultants.

Dr. Charles Lyman Greene, in a letter to the *New York Medical Journal*, scores this journal for not dealing out a severe rebuke to the "Western doctor" who advocated commissions to be paid to the general practitioner for cases referred. The condition of commercialism referred to by Dr. Greene, and brought prominently before the profession by the "Western doctor," indicates a rather deplorable state of affairs in the medical profession. The commission business has been carried on by the Eastern specialist for a great many years. It is only within the last three or four years that the practice has become at all common in the West. At the present time it is the practice of a certain few of the specialists in Denver to pay a regular commission, so we understand. There

are others who, as intimated in the *Colorado Medical Journal*, pat the general practitioner on the back, give him a good dinner, take him to the theater, give him a card to the club, or in some way "pull the wool over the victim's eyes" and leave him to believe that he, the specialist, is about the only friend the general practitioner has in the State of Colorado. There is another practice in Denver that is even more deplorable than the commission business, but this grows out of competition and does not indicate that low order of mental calibre, nor does it indicate that state of total depravity that is to be found among the commission doctors. We have said before that when one physician refers a patient to another doctor that the physician so referring that patient should be paid for all services rendered that patient. If he visits the patient and finds that the patient is one that he does not care to treat and refers it to the specialist, he should be paid for his visit. And, should he be called in consultation by the specialist, he should receive the same consultation fee as the specialist; if he gives the anesthetic or assists in the operation he should be well paid. We have known doctors, in the city of Denver, to have a patient referred to them by a general practitioner and afterward to assist in the operation or administer the anesthetic, the specialist collecting a good fee, the patient refusing to pay the doctor referring the patient on the ground that he had already paid the specialist, and the specialist in his turn refusing to pay the general practitioner for services rendered, and become indignant when it was intimated to him that he should look after the fee of the doctor referring the patient, and sarcastically replying that he was not a "commission doctor." There is one bone we have to pick with the specialist and that is, when a patient is referred to him he claims the patient as his and fails to recognize the fact that the patient sent to him still belongs to the doctor sending the patient. We have known it to occur frequently and we have heard the

charge frequently made that when a patient was sent, say to an ear specialist, this same ear specialist sent the patient to a neurologist or perhaps to a gynecologist or perhaps to a dermatologist or perhaps, later on, to an obstetrician or to a general surgeon. A specialist who will do a thing of this kind is not worthy of the support of the profession, is not entitled to recognition of any kind, in fact, he is ignorant of the code of ethics, or he is not a gentleman.

Oculists as Refracting Opticians. A recent excellent article by Dr. G. Melville Black, on "How to

Get Rid of the Refracting Opticians, Doctors of Refraction, Etc." has led us to offer a suggestion to physicians and medical societies in districts where there are no qualified eye specialists.

It is the custom of the various "Refracting Opticians," etc., to spend a part of their time traveling from town to town in the state, advertising their skill in the newspapers and often inducing the local physicians to become solicitous for them. Their "free examination" is amply paid for in the outrageous prices they obtain for their "glasses" (we have known people to pay from \$30.00 to \$75.00 for being "fitted") and as they are not permitted to use mydriatics their work is often incorrect and the patient has to follow out a series of changes, until he accidentally gets the proper glass, meanwhile being tortured and damaged by attempts to force his already weakened eyes to accommodate themselves to his improper glasses.

These opticians, in order to cover their chagrin at being forbidden the use of mydriatics, uniformly inveigle against their employment by oculists, telling horrible tales of blindness, cataract, etc., thus bringing discredit in the minds of the laity upon the legitimate ophthalmologists, who are among the most skillful members of the medical profession.

The obloquy thus thrust upon the legitimate eye men cannot fail, for psychological reasons, in reacting

to a certain degree upon the other members of the regular profession. It is, therefore, the duty of the physician to protect himself, in protecting the ophthalmologist, from this discredit, by opposing the traveling optician and supporting his qualified brother.

Our plan is this: Let the physicians of a district, or the county medical society, agree upon one or more reputable oculists, who shall be invited to visit their town or towns at certain intervals. Let the oculists also get together and make a fair division of these districts. Let the physicians in these places see that those of their clientele who need the services of experts in ophthalmology are brought to the oculist when he comes. In this way there is a mutual benefit and support; the oculist does not endeavor to discredit regular medical practice, and the physician is protecting himself, by protecting the specialist, forging one more link in the chain which shall unify the medical profession. Last, and most important of all, the patient receives proper treatment by a capable man, and is not made the victim of extortion.—G. H. S.

Neuritis from Eating Pork. Professor Spiller (*Philadelphia Polyclinic*, Sept. 24th) reports the case of a man who, shortly after eating putrefying pork, was taken ill with acute gastro-enteritis and also complained of paresthesia in the extremities, consisting of numbness, "pins and needles" and cold, with little or no pain except in the feet after walking. There was some swelling of the ends of the limbs, distinct muscular weakness and moderate diminution of objective sensation. The nervous symptoms continued unaltered during two months.

American Microscopical Society. This society, at its recent annual session, elected the following officers for the ensuing year: President, Dr. William C. Krauss, of Buffalo; First Vice-President, Professor A. M. Bleile, of Columbus, O.;

Second Vice-President, Dr. G. C. Huber, of Ann Arbor, Mich.; Secretary, Professor Henry D. Ward, of Lincoln, Neb.; Treasurer, Magnus Pflaum, of Pittsburg, Penn. Executive Committee, Professor S. H. Gage, of Ithaca; Dr. A. Clifford Mercer, of Syracuse, and Dr. V. A. Moore, of Ithaca.

Phlegmasia Alba Dolens. In phlebitis of the leg, from any cause, Da Costa (*Philadelphia Medical Journal*, Sept. 10th) is accustomed to wrap the whole limb in compresses of hot fluid extract of witch-hazel or of hot lead-water and laudanum. Laxatives are also given, and heart action is sustained by digitalis or kindred remedies. Absolute rest in bed and elevation of the limbs are essential. After the acute stage is over, if the swelling persists, gentle friction with belladonna or mercurial ointment or both combined may be carefully employed. Massage should be avoided until later, when it is useful for the persistent stiffness, lack of power and tendency to recurring swelling. At this period, likewise, the mechanical support of a bandage or a long elastic silk stocking is very advantageous.

Symptomatic Rashes in Children. Dr. David Walsh has a suggestive paper on this subject in October *Pediatrics*. He is not a believer in the reflex neurovascular theory of causation, but holds that such rashes are due to the excretory irritation of micro-organisms, of bacterial products, of drugs, or of the virus of various blood-borne diseases, as gout. The assumption that the urticarial, scarlatiniform and eczematous eruptions, so common with the gastrointestinal disturbances of improper feeding, is due to bowel absorption is supported by the fact that in adults the rash often appears after the use of an enema, which serves probably to stir up the toxin and render it more soluble. Again, the bacterial products may be in the milk of the nursing mother, so that we may

successfully treat the rash of a suckling child by attending to the septic uterus of the mother. The writer also alludes to the fleeting rash, associated with diarrhea in children, and to the so-called "teething" rash, which is really in most cases a symptomatic erythema, due to absorption of a bowel toxin. The rashes of the exanthems are in all likelihood due to irritation set up by elimination through the skin of specific organisms or their products. The early anomalous rashes of these diseases may be due to an early toxic erythema. Serum therapeutics often furnishes an object lesson along this line. One great practical deduction from these considerations is that any internal condition capable of inflaming the skin may also damage other and more vital organs, as for example the kidney.

Intravenous Injections of Normal Saline Solutions. Horace Tracy Hanks has an admirable article on this subject in the September *American Gynecological and Obstetrical Journal*, in which he warmly advocates the procedure and relates a number of confirmatory illustrative cases. In conclusion he urges the importance, first, of proper preparation before an exhausting operation by systematic stimulation or by intravenous injection; second, intravenous injections or two quarts or more of normal saline solution after dangerous hemorrhage; third, intravenous injection for bad shock, using full three pints or more of normal saline solution; fourth, intravenous injection for remarkably feeble pulse after, or even before, operation, using from one to three pints; fifth, intravenous injection for septicemia, especially when an operation is decided upon, using from one to two pints and repeating if bad symptoms return.

The apparatus required for transfusion is very simple, consisting of a sterilized two-quart fountain syringe with proper attachments and an aspirating or hollow needle, 2 m.m. in diameter and 7 or 8 c.m. long,

with a probe point about $1\frac{1}{2}$ m.m. in diameter for insertion into the vein, the opposite end being ground to fit the rubber tube. The normal salt solution, as is well known, is made by dissolving 90 grains of pure chloride of sodium in $33\frac{1}{2}$ ounces of distilled water, or practically a common sized teaspoonful of table salt in one pint of pure water, boiled a half hour and filtered through several thicknesses of a sterilized towel, then placed in a close bottle corked with cotton, protected by a bit of gauze.

A two-quart bottle should be filled with this solution before the operation and kept hot (115° - 118°) by means of hot wet towels around it.

Diagnosis of Cancer of the Breast. The editor of the *International Journal of Surgery* remarks that the classical signs of malignancy are adherence of the tumor to the deep parts and to the skin, retraction of the nipple, hardness of the tumor, sometimes with fluctuating portions if any cystic element should be present, and the early involvement of the axillary glands. In chronic mastitis, which often closely resembles cancer, there is a characteristic faintly edematous condition, and frequently regular retraction of the nipple, which is surrounded by a circular ridge of skin. If this is pulled back, the nipple stands out. In mammitis the attacks of pain are more frequent and severe than in cancer, and there may be an irritative form of axillary adenitis. The most important diagnostic sign lies in the rapid improvement noted in mammitis under the influence of rest and pressure. Tuberculous lesions of the breast are usually accompanied by pulmonary phthisis, temperature changes and local inflammation, and are sometimes multiple. If, says the writer, at a comparatively early date the so-called hard edema of cancer is rapidly followed by invasion of all the surrounding lymphatic tissues, producing ordinary edema, we may be certain that the cancer is of a very malignant kind.

Removal of Powder Stains. Dr. W. W. Hester, in the Oct. *Medical Summary*, suggests tattooing the stained parts with glycerole of papoid. For this purpose a tattoo instrument may be improvised by bunching a dozen of fine cambric needles and binding them tightly with strong flax or silk thread. This instrument is dipped into the glycerole and applied with repeated sharp thrusts, into the deeply stained skin, until thoroughly tattooed. There will be but little reaction or irritation, and if care is used no sepsis. The operation is a successful one, but may need to be repeated a second or third time before the deposit disappears entirely.

Natural Immunity of the Mucous Membranes of the Respiratory Tract. Henry Lewis Wagner of the *San Francisco Polyclinic*, concludes from personal researches (*New York Medical Journal*, Oct. 15th) that the natural resistance of the mucous membranes depends principally upon the "activity of leucocytes." He further states that the action of these leucocytes on bacteria does not consist in their total destruction—as observed in thermal or chemical disinfection—but in greatly diminishing their activity to form poisonous products or to enter the tissues. "In other words, the bacteria are slumbering on the mucous membranes, just as we meet such latent life in the vegetable kingdom, and in this inactive state the bacteria are carried away from our mucous membranes by the secretions and excretions."

The Topical Use of Alcohol in Puerperal Infection. Dr. George H. Noble (*Georgia Journal of Medicine and Surgery*, October) strongly advocates the local application of alcohol to the endometrium in cases of infection confined to the uterine cavity. After thoroughly cleansing this cavity, a sterile rubber catheter is introduced, having attached to its tip a strip of sterile gauze as wide as the thumb and

two yards long. The gauze is packed loosely about the catheter and serves to retain the alcohol (95 per cent.), a few drachms of which are injected through the catheter every quarter or half hour, until marked improvement has taken place, then gradually lengthening the intervals. The projecting end of the catheter must be kept thoroughly buried in sterile or antiseptic gauze in the intervals between injections. The writer refers to a number of cases which were not doing well under the ordinary treatment by curettage and bichloride douching, and which responded promptly to the use of alcohol in the manner stated. He explains the beneficial effect of this agent as being due probably to its dehydrating action upon the tissues, thus depriving the germs of that moisture which is necessary to their development.

Uses of Thyroid Extract. The physiologic action of thyroid extract in the main is to increase metabolism, to lower arterial tension and to stimulate the emunctories. In animal therapeutics it stands next to diphtheria antitoxin in its wide range of usefulness, says Dr. W. H. Kimball (*Journal of Medicine and Science*, October). Its most noteworthy application is in myxedema. In cretinism, bony and mental development are much improved by its administration. Thyroid sometimes does good in melancholia and is highly recommended for the troublesome symptoms accompanying the menopause, and in all uterine hemorrhages, particularly when due to fibroids. It is useful in obesity because it reduces weight, and in rickets because of its action on bone. Several cases of success from the employment of this remedy in ununited fracture are reported. About two-thirds of goitrous conditions, says the writer, improve under its influence.

Thyroids seem to be contraindicated in anemia and rheumatism. The dose varies greatly with different individuals, the approved custom being to begin with small daily doses (one or two grains) and increase

gradually up to 10 or 15 grains or more. Over dosage causes fever, rapid pulse, short breathing, vomiting and general cardiac depression, with sensation of tightness about the chest, vertigo and convulsions.

The Question of Robert Jardine, physician to the **Obstetric Douching.** Glasgow Maternity Hospital, (*British Medical Journal*, Sept. 17th) concludes that in an ordinary case ante-partum douching is unnecessary, and, in fact, is as likely to do harm as good. "If an antiseptic like corrosive sublimate is used, it will corrugate the tissues, hinder the descent of the presenting part, and render the tissues far more liable to being lacerated." A douche before delivery is necessary only when there is a purulent or putrid discharge from the vagina, or when any intrauterine operation needs to be done. An immediate and copious post-partum vaginal and uterine douche is indicated in the following conditions:

1. Post-partum hemorrhage—very hot.
2. Purulent discharge previous to labor.
3. Putrid fetus.
4. Introduction of hands or instruments into the uterus.
5. Considerable laceration of parts or very prolonged labor.

During the puerperium, the writer holds, the douche is quite unnecessary unless the lochia become putrid or when the temperature rises and there is evidently something in the uterus. According to the writer, the best confinement douche is a 1 per cent. lysol solution.

The Secretion of Milk. A. Corsar Sturrock (*British Medical Journal*, Sept. 17th) alludes to the chemical aspect of the subject in the following words: "There is a neucleoproteid in the cells of the mammary gland which is of a highly complex constitution, containing a nuclein, a carbohydrate

and proteid radicle. It may be the antecedent of caseinogen and of lactose. It contains a true nuclein, whereas caseinogen is a pseudonuclein albumin. The nuclein bases are not excreted, but seem to remain in the gland, probably in the nuclei of the cells, as active agents in the formation of more mother substance.

"Phosphocarnic acid, described by Siegfried as a constant constituent of milk, is present in the mammary gland in considerable quantities. It can also be split off from caseinogen by the action of rennin, and appears to be merely a decomposition product of caseinogen. It is more largely present in human than in cow's milk, and this may be of practical importance, since it is the richest phosphorus—holding body in milk—and in human milk the greatest part of the phosphorus is in organic, while in cows the greater part is in inorganic combination."

The Libel Suit of William Smith, Osteopathist. We see by an editorial in the *Medical Age* of September 26th that Mr. William M. Warren is after the Osteopath. He says, in concluding his paper: "Having put my hand to the plow in this uncompromising fight with quackery, I beg leave to assure you that there will be no turning back." And further adds: "I need not point out the bearings this contest must have on the interests of legitimate medicine, and I earnestly hope that the *Medical Age* may count on the moral support and commendation of the entire profession."

Enanthem of German Measles. Forchheimer (*Archives of Pediatrics*, October) lays stress upon the importance of this eruption in the differential diagnosis between rubella and rubeola or scarlatina. It differs from the enanthems of the latter two diseases in appearing contemporaneously with the exanthem, instead of from twelve to forty-eight hours previously. It is localized upon the uvula and soft

palate, rarely invading the hard palate, and fades away within twenty-four hours. The eruption is the same as upon the skin, being characterized by the size and arrangement of the efflorescence, the absence of great infiltration, and above all by its pure, pinky, rose-red color, very similar to the roseola of typhoid. During involution there are sometimes left pigmented deposits, in the form of yellowish spots or streaks.

Retroperitoneal Neoplasms. Diagnosis is the most important and difficult feature of the subject, but is much easier if the examination is made under an anesthetic, says Richard Douglass in the September number of *American Journal of Surgery and Gynecology*. A prominent characteristic of such tumors is the typical manner in which they push the abdominal organs to one side as they rapidly develop forward. Pronounced constitutional disturbances are soon manifested, and a marked cachexia gradually supervenes. Pressure disturbances of digestion and respiration make an early appearance, and before long the patient suffers from intermittent diarrheas, which are sometimes associated with pain, nausea and vomiting. In some cases the contour of the abdomen is very striking, with great symmetric swelling of the upper portion and but little bulging out in the side or below the umbilicus. The superficial veins are usually very much enlarged from pressure of the mass on the vena cava, and from distortion of the mesenteric veins, due to displacement of the organs. These tumors are seldom influenced by respiration, though sometimes decidedly so. On palpation they yield neither the elasticity or fluctuation of a liquid tumor (unless from cystic degeneration) nor the hardness of the ordinary uterine fibroma. Tumors that grow from the root of the mesentery and develop between its folds are very mobile, but those that are attached along the vertebrae or in the retroperitoneal spaces of the flanks are fixed. The most reliable means of diagnosing these

growths is in their relation to the colon, which is at first external, then lies in front, and finally centrally over the tumor. Aside from this colonic tympany, retroperitoneal tumors are usually dull upon percussion, but there is generally a suprapubic area of resonance. In certain instances there may be central resonance and dullness in the flanks, a condition simulating ascites. Edema of the legs, from pressure on the vena cava, may occur very early, and is of much importance from a diagnostic standpoint.

Western Surgical and Gynecological Association. This association meets in Omaha, December 28th and 29th next. We had this western organization with us in Denver last December. There was a very large representation from Nebraska, especially from the city of Omaha. The profession in Denver made rather a loud talk as to the number of Denver physicians who would attend the next meeting of the association. We heard several say that the representation from Colorado would be anywhere from fifty to one hundred. This is a good organization and the medical profession of the West should support it and we do hope to see a large representation of the Colorado profession at this Omaha meeting.

We are just in receipt of a letter from Secretary Simmons, who assures us that the prospects for a good meeting are very flattering. He desires to announce that the preliminary program will be issued on Nov. 20th, at which time it is desired to have all titles in. The members of the association in Colorado are urged to contribute a paper for the next meeting.

The officers of the association are as follows: President, D. S. Fairchild, M.D., Clinton, Iowa; First Vice-President, Chas. Byron Nichols, M.D., Denver, Colorado; Second Vice-President, H. D. Niles, M.D., Salt Lake City, Utah; Secretary and Treasurer, Geo. H. Simmons, M.D., Lincoln, Nebraska. Executive Board: Lewis Schooler, M.D., Chairman, Des Moines, Iowa;

Herman E. Pearse, M.D., Kansas City, Missouri; C. K. Fleming, M.D., Denver, Colorado; A. F. Jonas, M.D., Omaha, Nebraska; C. B. Campbell, M.D., St. Joseph, Missouri. Chairman Committee of Arrangements, J.P. Lord, M.D., Omaha, Nebraska.

We can guarantee the medical profession in general that the profession in Omaha, with Dr. Lord as chairman of the committee on arrangements, will tender a royal reception and a royal entertainment and a glorious feast, with perhaps many other royals.

The Wyoming State Medical Society. We are just in receipt of a letter from Dr. E. Stuver, giving us a glorious account of the recent meeting of the Wyoming State Medical Society. We are truly glad to see the Western States coming to the front in medical matters. We published some time ago the programme of papers to be read at this meeting. Wyoming is one of the states represented in the Rocky Mountain Inter-State Medical Society.

The officers of the Society for the ensuing year are as follows: President, R. Harvey Reed, M.D. Rock Springs, Wyo.; Secretary and Editor, E. Stuver, M.D., Rawlins, Wyo.; Treasurer, C. H. Solier, M.D., Evanston, Wyo.; First Vice-President, J. H. Maynard, M.D., Cheyenne, Wyo.; Second Vice-President, G. G. Verbryck, M.D., Cambria, Wyo.; Third Vice-President, E. E. Levers, M.D., Almy, Wyo.

We hope to publish in the next issue of the *TIMES* either the entire address of President Reed, or, at least, a very full abstract.

EDITORIAL ITEMS.

Salicylates.—These are least irritating to the stomach when administered in milk.

Eosinophilia.—This is a marked diagnostic feature during the acute stage of trichinosis.

Tuberculous Cough.—Sanger speaks very highly of the fluid extract of golden seal, 20 to 30 minims four times a day.

Tabetic Pains.—For the lightning pains of locomotor ataxia the coal-tar analgesics, such as acetanilid, commonly suffice.

Tinnitus Aurium.—This troublesome symptom is not infrequently due to uricemia, and is cured permanently by the cure of the primary disease.

Urticaria.—Carbolic acid, one part in thirty of water, with a little glycerin is recommended by the *Chicago Clinic* as a useful application for hives.

Our Latest Acquisition.—There are something over 1,000 lepers in the Hawaiian settlement, and the malady is said to be extending rather than retroceding.

A Good Medical Journal Gone.—The *Atlantic Medical Weekly* has gone out of existence, and its subscription list has been absorbed by the *Philadelphia Medical Journal*.

Exophthalmic Goitre.—Solis-Cohen is of the opinion that the best results in therapy are obtained by the conjoint administration of thymus and suprarenal substance.

Mortality in the Army.—The records show that up to September 1st only 84 soldiers died by yellow fever, against 515 deaths due to typhoid, 81 to malaria, and 63 to dysentery.

Southern Surgical and Gynecological Association.—This society will meet in Memphis, December 6th. This is a very strong organization, composed of the best men in the South.

New Shoes a Cause of Death.—The case is related in the *Journal of American Medical Association* of a man who died from blood poisoning, resulting from an abrasion caused by the wearing of new shoes. His heirs recovered accident insurance, the verdict being confirmed by the United States Circuit Court of Appeals.

Should the General Practitioner Receive Any Fee for Referring Cases to the Specialist?—Any physician rendering any services to his patient should be paid for this service by the patient himself.

Saccharin as a Sweetening Agent.—This coal tar derivative is 280 times as sweet as cane sugar. It has lately been advocated as a substitute for the latter in infants' foods when these are causing trouble from acid fermentation.

Uric Acid in the Saliva.—Boucheron (quoted in *Buffalo Medical Journal*) states that by the murexide test uric acid can be detected in the saliva of patients suffering from the uric acid diathesis, particularly in the intervals between meals.

Phosphaturia in Fractures.—The daily amount of earthy phosphates in the urine is markedly increased for a time in cases of fracture, decreasing again to normal when repair is complete. The prognostic application of this fact is self-evident.

Southern Surgical and Gynecological Association.—This society will hold its next meeting in Memphis on November 8, 9 and 10. The meeting is expected to be successful in every respect. A cordial invitation is extended to all members of the medical profession.

Arrow Root Starch.—An editorial in the *Philadelphia Polyclinic* urges the wider use of this starch in place of the common food starches as an ingredient of invalid diet, on account of its much greater digestibility, as proved in empirical practice and also in the laboratory.

Bronchorrhea.—Some time, when you have a case that bothers you, says Dr. W. C. Abbott in the *Alkaloidal Clinic*, give one granule of strychnine arsenate, gr. 1-134; two or three of calcium sulphide, gr. 1-6, and one tablet of Aulde's nuclein, all together every two hours, and note results.

The Bacteriology of Hepatic Cirrhosis.—Professor Adami claims to have discovered in some cases of "hobnail liver," particularly in the liver and abdominal lymph glands, a minute micrococcus or bacillary organism resembling closely the pathogenic species found in the infectious cirrhosis of cattle.

Dr. Parkhill Home Again.—We are in receipt of a card from Dr. Clayton Parkhill, announcing to the profession that he has retired from the military service, and that he has resumed private practice. The doctor is located in handsome offices in the Equitable Building. Dr. Parkhill has rendered his country good service and will be hailed with a hearty welcome back into the rank and file of every-day surgeons and practitioners.

Glycosuria and Gall Stones.—Alfred Exner (quoted in *Philadelphia Medical Journal*) found about .4 per cent. of sugar in the urine in all but one of 40 cases of cholelithiasis. The diagnosis in every instance was confirmed by operation. The glucose disappeared gradually after the removal of the calculi.

Reflex Neuralgia.—Pain of this character is rare and usually traumatic in origin. In its treatment Thomson asserts that the most effective resource is the persevering use of the hot-water douche to the parts first affected, for an hour three times a day, followed by hypodermics of morphine and atropine.

The Art Treasures of America.—Americans will gain a new estimate of the progress which the United States is making in the appreciation and the cultivation of art from reading Mr. William Sharp's description of *The Art Treasures of America*, reprinted from *The Nineteenth Century* in *The Living Age* for October 29th.

Nitroglycerin for Spasmodic Croup.—Dr. G. G. Marshall (quoted in *Cleveland Medical Gazette*) has found trinitrin in small and frequently repeated doses a useful antispasmodic in these cases. Children, 5 to 10 months old, will bear 1-1,000 to 1-600 of a grain, which may be repeated, if need be, in five to ten minutes, and continued from time to time as indicated by the symptoms.

Treatment of Migraine.—Frieser (quoted in *Philadelphia Medical Journal*) regards menthol valerianate as almost a specific for this malady. Iron should be administered if the patient is anemic. Benzacetin and trophenin are recommended as analgesics in .5 gm. doses at the time of the attack, the menthol compound being taken during the intervals. Tea and coffee are particularly to be avoided.

Periodical Neuralgia.—Prof. Wm. H. Thomson regards ergot as a true specific for these pains, whatever their cause or seat may be. He advises that a drachm of the fluid extract be taken every two hours, with the same quantity of elixir of cinchona, in water, to prevent nausea. If the stomach is intolerant of the drug, it may be administered by the rectum in two ounces of water. The first dose should be taken at the first onset of the pain. From one to three doses is all that is required.

BOOKS.

Manual of Skin Diseases.—With Special Reference to Diagnosis and Treatment. For the Use of Students and General Practitioners. By W. A. Hardaway, M.D., Professor of Diseases of the Skin in the Missouri Medical College, St. Louis. Second Edition, Entirely Rewritten and Much Enlarged. In One Handsome Twelvemo. Volume of 560 pages, with 40 Engravings and 2 Colored Plates. Cloth, \$2.25 net. Lea Brothers & Co., Publishers, Philadelphia and New York.

This compact epitome of dermatology is all the author intended, namely, a "useful and trustworthy reference book of diseases of the skin, especially from the standpoints of diagnosis and treatment." The author's long experience as a medical teacher has enabled him to present the subject with admirable clearness—a very essential quality in works upon dermatology. In the present edition he has dropped the alphabetic arrangement of diseases, and has instead adopted the more scientific classification of the American Dermatological Association. The introductory observations in the first part of the text include a large number of very helpful generalizations. Although the contents of the volume have been fully revised and greatly enlarged over the first edition, its price has been reduced—an indication that the publishers are confident of a growing popular demand for the work.

Practical Diagnosis.—The Use of Symtoms in the Diagnosis of Disease. By Hobart Amory Hare, M.D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Third Edition, Enlarged and Thoroughly Revised. In One Octavo Volume of 615 pages, with 204 Engravings and 13 Full-Page Colored Plates. Cloth, \$4.75 net. Lea Brothers & Co., Publishers, Philadelphia and New York.

Three large editions within two years is an enviable record of popularity for any medical work and can depend only on the fact that the book fills an actual need. Such is the case with the work before us—a most pithy and practical exposition of the most essential side of medical practice. As the title declares, the book is concerned with the use of symptoms in diagnosis, which is led up to in the natural order that must be followed at the bedside or in the office. As far as practicable, symptoms are classified regionally. A copious index furnishes a key to ready reference, so that, given the leading symptoms of a disease, a diagnosis can be made ordinarily within a few minutes. Differentiation is much facilitated by a

large number of highly instructive diagrams and photogravures. The present edition is both an improvement and an enlargement of former ones. It may be used very profitably in connection with the seventh edition of the author's Text Book of Practical Therapeutics, which is published simultaneously, but is of no less service when utilized as an independent treatise.

American Pocket Medical Dictionary.—Edited by W. A. Newman Dorland, A.M., M.D., Assistant Obstetrician to the Hospital of the University of Pennsylvania. Containing the Pronunciation and Definition of over 26,000 of the Terms Used in Medicine and the Kindred Sciences, along with over 60 Extensive Tables. Price, \$1.25 net. Philadelphia: W. B. Saunders, 925 Walnut Street, 1898.

This handy and tasteful little volume covers the ground remarkably well, considering limited space. The print is clear, and the heavy type employed for subdivisions makes reference quick and easy. The anatomic and other tables are of great service to freshman and sophomore students, to whom we cordially recommend this pocket dictionary.

Essentials of Materia Medica, Therapeutics and Prescription Writing.—Arranged in the Form of Questions and Answers, Prepared Especially for Students of Medicine. By Henry Morris, M.D. Fifth Edition, Revised and Enlarged. Price, \$1.00. Philadelphia: W. B. Saunders, 925 Walnut Street, 1898.

The latest edition of this handy and useful little volume follows closely the last edition of the U. S. Pharmacopeia. All new remedies of note are included, and much that is obsolete has been dropped. The dosage of each preparation is now expressed in the metric as well as the older system. Important words are italicized. A good index gives ready access to the text.

A Treatise on the Science and Practice of Midwifery.—By W. S. Playfair, M.D., LL.D., F.R.C.P., Emeritus Professor of Obstetric Medicine in Kings College; Consulting Physician for the Diseases of Women and Children to Kings College Hospital, General Lying-In Hospital, Evelina Hospital for Children, etc.; Late President of the Obstetrical Society of London. Seventh American from the Ninth English Edition. With 7 Plates and 207 Illustrations. One Octavo Volume of 689 pages. Price, Cloth, \$3.75 net; Leather, \$4.75 net. Lea Brothers & Co., Philadelphia and New York, 1898.

This work stands, by popular verdict, at the head of all American and English books upon obstetrics. It is now twenty-two years since the first edition of the treatise was published, and the author has celebrated its majority by an exceptionally thorough

revision and rewriting of the text. The number of plates and drawings has also been increased. The author's descriptions are graphic, and his grasp of the subject comprehensive in the highest degree. The common difficulties of pregnancy, labor and the puerperium receive his careful attention as much as do the more serious surgical procedures. The work is at the same time practical, conservative and authoritative.

The Care of the Baby.—A Manual for Mothers and Nurses, containing Practical Directions for the Management of Infancy and Childhood in Health and in Disease. By J. P. Crozer Griffith, M.D., Clinical Professor of Diseases of Children in the Hospital of the University of Pennsylvania. Second Edition, Revised. Twelvemo, 404 pages, with 67 Illustrations in the Text and 5 Plates. Price, \$1.50. Philadelphia: W. B. Saunders, 925 Walnut Street, 1898.

The contents of this volume are embraced in nine chapters and an appendix. The chapters are entitled: "Before the Baby Comes," "The Baby," "The Baby's Growth," "The Baby's Toilet," "The Baby's Clothes," "Feeding the Baby," "Sleep," "Exercise and Training, Physical, Mental and Moral," "The Baby's Nurses," "The Baby's Rooms," and "The Sick Baby." The appendix embraces receipts and remarks on dietary, remedies for local use and for internal administration, dosage, massage and other miscellaneous subjects. The author's suggestions to mothers are sensible and practical. The book is not intended in any way to supplant, but rather to supplement the physician's efforts. It is the best manual upon the subject that can be recommended by the family physician to married women.

Practical Urinalysis and Urinary Diagnosis.—A Manual for the Use of Physicians, Surgeons and Students. By Charles W. Purdy, M.D., LL.D., (Queen's University); Fellow of the Royal College of Physicians and Surgeons, Kingston; Professor of Clinical Medicine at the Chicago Post-Graduate Medical School. Author of "Bright's Disease and Allied Affections of the Kidneys;" also of "Diabetes: Its Causes, Symptoms and Treatment." Fourth, Revised Edition. With Numerous Illustrations, including Photo-Engravings and Colored Plates. In One Crown Octavo Volume, 365 Pages, Bound in Extra Cloth, \$2.50 net. The F. A. Davis Co., Publishers, 1914-16 Cherry St., Philadelphia; 117 W. Forty-Second St., New York; 9 Lakeside Bldg., 218-220 S. Clark St., Chicago, Ill.

The first edition of this work appeared four years ago. Since that time it has been adopted as a text book in about sixty medical colleges of this country. The text is divided in two parts, on the analysis of urine and urinary diagnosis respectively, with an appendix on examination of urine for life insurance. General con-

siderations, physical properties, theories of secretion and excretion, composition of normal urine, abnormal urine, proteids, carbohydrates, urinary chemical and anatomical sediments, gravel and calculus are taken up in detail, with special attention to clinical significance. The centrifugal method of quantitative analysis, as developed by the author, is both simple and trustworthy, as is likewise his method for the determination of sugar. The second part of the book, on urinary diagnosis, is a practical grouping and application of facts of the highest importance to every practitioner who seeks to discriminate between the various diseases of the urinary organs. The appendix furnishes an admirable summary of the subject especially adapted to the needs of life insurance examiners.

A Primer of Psychology and Mental Disease.—For Use in Training Schools for Attendants and Nurses and in Medical Classes. By C. B. Burr, M.D., Medical Director of Oak Grove Hospital for Nervous and Mental Diseases, Flint, Mich.; Formerly Medical Superintendent of the Eastern Michigan Asylum; Member of the American Medico-Psychological Association, etc. Second Edition, Thoroughly Revised. $5\frac{1}{2} \times 7\frac{3}{4}$ Inches. Pages ix-116. Extra Cloth, \$1.00 net. The F. A. Davis Co., Publishers, 1914-16 Cherry St., Philadelphia; 117 W. Forty-Second St., New York; 9 Lakeside Bldg., 218-220 S. Clark St., Chicago, Ill.

This little book, originally designed for the use of attendants on the insane, has found favor also in the eyes of the medical profession because of its brevity and clear and simple presentation of a very difficult theme. The present edition is in four parts. The first of these is concerned with the first principles of psychology. In the second part the author describes and distinguishes between the various forms of insanity. The third part contains directions for the use of attendants in the management of cases of insanity. The final division of the text consists of general suggestions as to what to do and what to avoid in caring for the insane. The book is one of wide serviceability.

The Principles and Practice of Medicine.—Designed for the Use of Practitioners and Students of Medicine. By William Osler, M.D., Professor of Medicine in the Johns Hopkins University, and Physician-in-Chief to the Johns Hopkins Hospital, Baltimore. Third Edition, Entirely Revised and Enlarged. New York: D. Appleton & Co.

This work, which first appeared six years ago, has taken from the first a foremost rank as a text book for students and a guide in practice. The author has had exceptional clinical opportunities, which he has utilized to the highest degree for the benefit of his readers, and nearly every topic discussed shows an intimate personal

familiarity upon his part with the conditions considered. His manner of presentation is definite and original, and he has evinced excellent judgment in the arrangement of sections and the maintenance of a proper perspective. In the description of symptoms he is particularly terse and sententious. Though not an ardent therapist, his remarks on treatment are generally safe and helpful. The present edition has been very thoroughly revised, or rather recast, with much fresh matter and a number of entirely new articles. There is a summarized mention of the most recent medical progress from journal literature up to within a few weeks of the present time. Aside from dermal, aural and ocular disorders and diseases peculiar to women, the entire field of medicine is gone over with care and judgment. An extensive index offers instant access to any part of the text.

Medical News Visiting List for 1899.—Weekly (dated, for 30 patients); monthly (undated, for 120 patients per month); perpetual (undated, for 30 patients weekly per year); and perpetual (undated, for 60 patients weekly per year). The first three styles contain 32 pages of data and 160 pages of blanks. The 60-patient Perpetual consists of 256 pages of blanks. Each style, in one wallet-shaped book, with pocket, pencil and rubber. Seal Grain Leather, \$1.25. Thumb-letter Index, 25 cents extra. Philadelphia and New York: Lea Bros. & Co.

A visiting list is an indispensable convenience for the active practitioner. Its carefully adapted blanks enable him at once to note clinical details of every day work, as well as charges and receipts, and to unburden his memory from what can better be carried on paper. It also furnishes him with a legal record necessary for the collection of delinquent bills. Prominent among the many books of this nature stands the *Medical News Visiting List*. Its blank pages are arranged to classify and record memoranda and engagements of every description occurring in the practice of the physician, surgeon or obstetrician. The work opens with 32 pages of printed data of the most useful sort, including an alphabetic Table of Diseases, with Approved Remedies, a Table of Doses, Sections on Examination of Urine, Artificial Respiration, Incompatibles, Poisons and Antidotes, a Diagnostic Table of Eruptive Fevers, and a full-page plate showing at a glance the incisions for ligation of the various arteries, an invaluable guide in such emergencies. The *Medical News Visiting List* is issued in four styles, adapted to any system of records and any method of keeping professional accounts. It is printed on fine, tough paper, suitable for pen or pencil, and durably and handsomely bound in the size of a wallet for the pocket. When desired, a ready reference thumb-letter index is furnished, which is peculiar to this list and an economizer of time.

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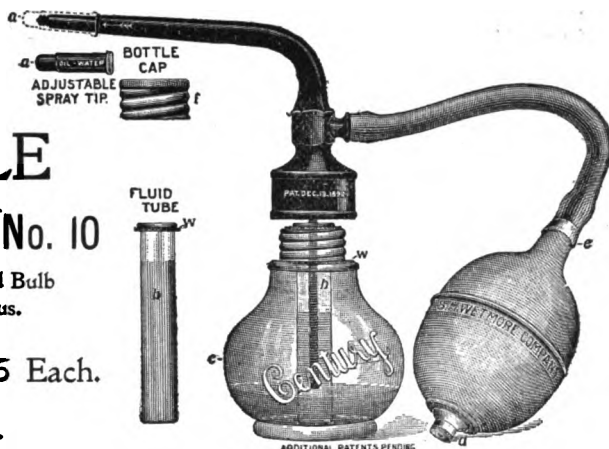
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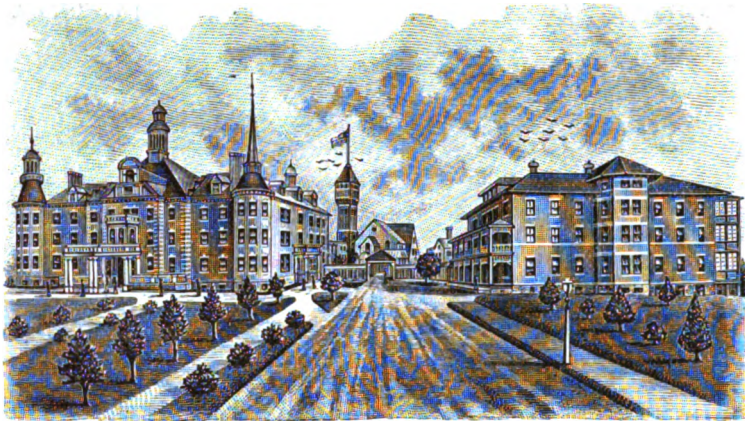
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ORIGINAL COMMUNICATIONS.

TREATMENT OF ENLARGEMENT OF THE PROSTATE GLAND BY MEANS OF THE BOTTINI GALVANO-PROSTATIC INCISOR, WITH REPORTS OF CASES.

By **LEONARD FREEMAN, M.D.,**

Professor of Surgery, Gross Medical College; Surgeon to the Arapahoe County
Hospital, and to St. Anthony's Hospital,

Denver, Colorado.

The effects of enlargement of the prostate in old men are so frequent that we are apt to lose sight of their grave importance. To the debility of body and mind arising from cystitis, is added the unutterable annoyance of frequent, painful micturition, especially at night, which is so wearing upon old people. It would be difficult to estimate the number of deaths indirectly attributable to hypertrophy of the prostate, to say nothing of those directly due to it.

Here, as in other instances, the saying applies, that where so many forms of treatment have been suggested no one of them is entirely satisfactory.

Continual catheterization, with irrigation of the bladder, may make life tolerable; but it is a wearisome task and seldom, if ever, gives complete relief. Castration, although efficient in many cases, fails in many others, and it is impossible to state beforehand what the result will be. In addition, even the oldest men object to being unsexed and mutilated, to say nothing of the danger, and the mental effects that may supervene. Resection of the vasa deferentia, although safer, is in some respects scarcely preferable to castration, and if the full consequences were always explained to patients, as they should be, objections to the operation would oftener be met with. Perineal section is often unsuccessful and too frequently accompanied by serious hemorrhage. Supra-pubic prostatectomy is fraught with danger in the old and feeble, and is not certain in its effects; while the establishment of a supra-pubic fistula is far from satisfactory and entails

much discomfort upon the patient. Cauterization through the rectum is so recent a procedure that intelligent judgment upon it cannot be passed, although there would seem to be danger of serious infection and the formation of fistulae. Little permanent advantage can be gained by the passage of sounds or catheters, even though they be left in situ for considerable lengths of time; while the results of the administration of glandular extract have not been satisfactory.

Something over twenty-two years ago, Bottini, of Pavia, began experimenting upon an ingenious mode of treatment which he has since perfected, and which I feel sure deserves careful attention. Strangely enough, in spite of the simplicity of the idea, the comparative freedom from danger, and the numerous brilliant results which have been achieved, it is within the last year or so only that the method has been adopted by others, and then by but few men scattered here and there about the world, —Freudenberg, of Berlin; Czerny, of Heidelberg; Thompson, of London; Willey Meyer, of New York, and quite recently several others. Their conclusions, however, have been almost universally favorable.

The symptoms in enlargement of the prostate, as is well known, arise from a difficulty in emptying the bladder, due particularly to pouching behind the gland, and largely to direct obstruction to the outflow of urine. This obstruction may be caused by encroachment of the hypertrophied lateral lobes upon the calibre of the canal; to increase in size of the middle lobe, forming a bar or valve that projects into the bladder; or to the presence of a constricting intravesical collar surrounding the urethral opening. Whichever of these conditions be present, in order to effect a permanent cure the level of the urethral orifice must be lowered and a free passage for the urine provided. Bottini fulfills these requirements with the aid of a remarkably ingenious instrument, inserted through the urethra. It contains a concealed platinum blade, heated by electricity, with which several deep furrows are burned through the glandular substance. The procedure has many advantages: (1) There is no mutilation and no external wound, the instrument being manipulated through the urethra. (2) A general anesthetic, often so dangerous in old and debilitated individuals, is not required, the local application of cocaine being sufficient to control the surprisingly small amount of pain occasioned. (3) There is but little hemorrhage, generally none at all, the vessels being sealed by cauterization. (4) There is small danger of infection and usually but a trivial rise of temperature, the wounds being necessarily aseptic and the charred surfaces preventing absorption of toxic products

until granulation sets in. (5) In most instances the patient may be permitted to sit up and even walk about to a certain extent in two or three days, a point of much importance in old and feeble persons. (6) The effects are often immediate, more or less urine being voided within a few hours where it was previously impossible to pass a drop. (7) But few, if any, relapses have been observed; in fact, the improvement has rather a tendency to increase.

The beneficial effects are due in part to: (1) The channels burned through the substance of the gland; (2) relief from congestion, due to obliteration of vessels; (3) cicatricial contraction, which is steadily progressive. Reunion of the wounds does not occur, because their surfaces are charred, and kept apart by the presence of the urine; there is also more or less peripheral muscular contraction.

Bottini's apparatus resembles a lithotrite, the male blade of which is replaced by a platinum knife, which can be heated by a current of electricity passing through the handle. Running through the entire length of the instrument, to the end of the female blade and back again, is a channel for the passage of ice-water, which prevents unnecessary burning of the tissues. The electricity may be obtained from a suitable battery or from the city current, the strength being regulated by a rheostat.

Leaving out many necessary details, the operation is performed essentially as follows:

The instrument is first tested, in order to determine the strength of current necessary to bring the blade to a good red heat, and the cooling apparatus is adjusted so as to insure a continuous flow of ice-water from a fountain syringe. The patient's bladder is washed out and thoroughly emptied by most operators, although Freudenberg prefers to have the viscus well filled. A drachm or so of a 1 per cent. or 2 per cent. solution of cocaine is then injected into the posterior urethra, when, after an interval of about five minutes, the operation may be begun.

The instrument is inserted into the bladder and its beak hooked over the inferior rim of the prostate, where it is firmly held, and as soon as the ice-water flows freely, the previously determined amount of electricity is turned on. A finger in the rectum will insure exactitude of application of the blade. To make sure that the platinum knife is sufficiently heated, one should wait ten or fifteen seconds; then the screw at the end of the handle is slowly turned, dragging the heated blade through the floor of the prostate. The length of the incision, previously determined by rectal and urethral examination, is regulated by a scale inscribed upon the shaft of the screw.

It is surprising how easily the procedure may be accomplished. Too little resistance would mean too great heat, while too great resistance would suggest either an increase of the current or a pause until the knife became reheated. Pain is nearly always slight. It is generally advisable to make at one sitting two, or possibly three, incisions, one through the floor of the prostate (the most important), one through a lateral lobe, and perhaps one through the urethral roof. The procedure requires from two to five minutes. There is usually but little after-pain, although some may be experienced in voiding urine. Bleeding, if it occur at all, is nearly always trivial. The bladder should be irrigated daily to assist in the removal of bits of sloughing tissue which are generally small in size, but it is not only unnecessary to leave a catheter in the urethra, but positively harmful, as secondary hemorrhage or infection may result.

Many cases recover rapidly and can be discharged within three weeks, but my own experience has been that a considerably longer period may be required for complete recovery. If the first operation is not followed by sufficiently speedy relief, the procedure may be repeated with impunity within a few days, according to Bottini and others.

My own limited experience with the Bottini incisor has been so encouraging that I feel justified in bringing it before you:

Case 1.—A Mexican, aged 69 years, in fair physical condition. Prostate, as felt through the rectum, smooth, firm, and the size of a small lemon. For several years he has had considerable trouble with his bladder. More recently he has been obliged to urinate an annoying number of times during the night. At the time of entering St. Anthony's Hospital he was compelled to use a catheter, although he could pass, with painful effort, a small amount of urine spontaneously. There was considerable cystitis, with pus in the urine. He was given salol internally and the bladder washed out daily for perhaps two weeks, marked improvement in the cystitis resulting. The Bottini instrument was employed on May 28th, 1898, a general anesthetic being given because the man could not speak English, and we were unable to make him thoroughly understand just what was going on. An incision 3 c. m. in length was made in the middle lobe, and one 2 c. m. in length in the left lateral lobe. The patient passed urine several times in small quantities during the succeeding twelve hours. The first installment was strongly colored with blood, which, however, did not appear afterwards. There was some pain on urinating. The patient was up on the second day. The temperature varied from 99 to 100½ during the first three or four days, and then dropped to normal, where it remained. Daily irri-

gation of the bladder was kept up for several weeks in order to insure cleanliness and assist in the evacuation of sloughing tissues. Pain at any time was slight. Before the operation a larger sized soft catheter than No. 7 could not be introduced, but when the patient left the hospital a No. 15 passed into the bladder with ease, and the patient was passing his urine with perfect freedom. The residual urine was greatly reduced, and the patient got up much less frequently at night. Several weeks after the incision of the prostate, there being some irritation at the neck of the bladder, I injected into the posterior urethra a small quantity of a weak solution of nitrate of silver. This was immediately followed by an attack of acute epididymitis for which, however, the Bottini operation was not to blame. I heard indirectly from this patient some three months later. His condition was still satisfactory.

Case 2.—An Englishman, aged 73, fairly well preserved, entered St. Anthony's hospital July 8th, 1898. The prostate projected into the rectum as a firm, smooth, round mass the size of a lemon. For several years he had been compelled to get up a number of times at night for the purpose of urinating. Following the catching of a severe "cold" he had been unable to pass urine for a few days before entering the hospital. For six weeks the patient's urine was drawn with a small metallic catheter, it being impossible to introduce a rubber instrument. During this time he was unable to pass a drop of urine voluntarily, and suffered considerably from irritation of the vesical neck. While in this condition it became necessary to operate for strangulated hernia, the healing of the wound being uneventful. The prostate was incised with the Bottini instrument on August 20, 1898, under local cocaine anaesthesia, the patient lying perfectly still during the operation and appearing to suffer no pain whatever. Two furrows were cut through the gland, one in its floor and one in the left lateral lobe, the former 3 c. m. in length and the latter 2 c. m. There was no hemorrhage at the time of the operation and none later, the urine remaining perfectly clear. In order to insure satisfactory cauterization I passed the heated platinum blade twice through each furrow, which I now regard as an error, as I have reason to believe, from the size of a slough passed later on, that I cut quite a large piece from the substance of the gland. The patient was out of bed on the second day; there was not much pain and the temperature rose little above normal until the sloughs began to separate on the tenth day. Catheterization was kept up, together with irrigation of the bladder. On August 30th, the temperature began to rise and remained up for some days, once reaching 104 degrees. Although the temperature was ele-

vated, the patient's condition was not alarming, and the pulse was not high. The first spontaneous evacuation of urine (2 oz.) occurred on September 9th. The quantity rapidly increased, until three days later the use of the catheter was discontinued, the patient passing urine in a large free stream. A No. 15 soft catheter entered the bladder without obstruction. In this case, spontaneous urination would perhaps have occurred sooner if I had repeated the operation within a few days, following the first intervention. Three weeks ago, when I last heard from the patient, he was in excellent condition.

In conclusion:—Perhaps nearly 150 cases have been operated upon with but few deaths. Among over 80 operations reported by Bottini, but two individuals died, these deaths occurring before he had perfected his instrument by the addition of the cooling apparatus. Freudenberg has had several deaths in 37 cases, one being from fat emboli of the lungs. Three cases died out of 12 operated upon by Willey Meyer, one from sepsis in combination with surgical kidneys. Nearly all the cases have been cured or greatly benefited. But one relapse has been noted. The record is far better than has been furnished by any other method, including castration, the mortality of which has been much higher. The exact mortality is at present difficult to estimate but that it is remarkably low, considering the physical condition of many of the patients upon whom it is necessary to operate, is certain. It is likely, however, that as the number of operations increases the number of deaths will be greater, for in debilitated old men with badly damaged kidneys, no operation, however trivial, can be made without some danger. Although, according to Bottini, the incisor can be used with impunity in the presence of cystitis, yet it would seem to be advisable to eliminate, as far as possible, inflammation of the bladder before operating. The most striking and satisfactory results can be obtained in cases where no urine has been passed for a long time except by means of a catheter. The bladder will here be found to exhibit a maximum of tolerance to instrumental interference. In fact, one of the strongest indications for the operation is a necessity for constant catheterization.

TREATMENT OF MALARIAL FEVER, A PERNICIOUS CASE.

By WILLIS J. RAYNOR, M.D.,

Acting Assistant Surgeon, U. S. Army; Acting Surgeon, Fort Logan, Colorado; Lecturer
on *Materia Medica* at the Gross Medical College, Denver, Colorado;
Member American Medical Association,

Fort Logan, Colorado.

The treatment of a considerable number of cases of malarial fever in the "Shadows of the Rocky Mountains," a region entirely exempt from that disease, has been brought about by the return of soldiers from the Cuban campaign of the past summer.

These malarial cases have been somewhat unique in that they have presented almost the entire gamut of symptomatology, the symptoms depending upon the localization of the plasmodium. He who looks for the old malarial trinity of chill, fever and sweat will surely be disappointed, for nearly all cases are atypical. Of over one hundred cases of intermittent fever treated in this hospital from September 17th, 1898, to November 1st, 1898, every case admitted has been a recurrent one, being the second to the fourth attack since contracted in Cuba.

The men presenting themselves for treatment are anaemic cachectic and emaciated, the hemoglobin in many being as low as 30 degrees, and the blood examinations showing the crescentic forms of the plasmodium. Nearly all have a spleen that the merest tyro can palpate. One case presented had a spleen, the raised outlines of the lower border of which could actually be seen above the thinned abdominal walls. The gastro-intestinal irritation and consequent mal-assimilation presented in most cases led me to discard the heretofore old reliable sulphate of quinine and try the bi-sulphate in six grain doses in capsules. This did better, but in many cases was promptly ejected or not quickly absorbed. I then turned to hypodermatic medication. A solution was made as follows—to every thirty-two grains of bi-sulphate of quinine, five grains of tartaric acid were added. The result was a yellowish liquid containing approximately fifteen grains of quinine to each fluid dram. The bi-muriate of quinine in one grain tablets, furnished by the medical department, can be made into a solution of the same strength by the addition of hydrochloric acid. As the ordinary hypodermic syringe barrel holds one-half a dram, this has been my standard dose, about seven and one-half grains. This has been the remedy in all cases of more than ordinary severity, one injection every three hours

until thirty grains have been given daily. Other remedies are given to palliate various symptoms as they arise, but quinine, hypodermatically, has been the sheet anchor, and of the one hundred and three cases treated in this hospital, every case has recovered, and thus far, there have been but three recurrences, and of the great number of injections given, there has been but two slight resulting abscesses, each requiring but one dressing.

The highest temperature was 106.6 degrees Fah., the lowest 96 degrees Fah.; many went above 105 degrees Fah. In no case, after the injections were begun, was there a second rise of temperature of more than two degrees. High temperature was no contraindication to the injections. Most cases being atypical, it is impossible to predict the time of the next paroxysm. In nearly all, the temperature went sub-normal, one or two degrees, gradually came up to normal and stayed there.

I believe the hypodermic administration of quinine to be the best means of treating the sub-tropical malarial fevers with which we will often have to deal since the acquisition of Cuba and Porto Rico. This means is safe, sure and quick.

On account of its rarity and the fact that very few of my fellow practitioners will ever have the opportunity of seeing a similar case in this climate, I beg to present the following:

Arthur H——, a private of Company "I," 7th U. S. Infantry, gives a history of being with his regiment in the Cuban campaign. He felt well until the morning of July 4th, when he had a pronounced chill, followed by fever and sweat, being sick for three weeks. He returned to the United States with his regiment and was sick for four days at Montauk Point, L. I. He was transferred to St. Francis Hospital, N. Y., where he remained twelve days, when he was granted a furlough with permission to go to his home in Denver, Colorado, where he arrived on September 12th. At that city he had chills and fever at times, having no regular treatment, but taking some quinine.

He was admitted to the U. S. Hospital at Fort Logan, Colorado, at 10:30 a. m. on October 27th, when the above history was obtained. His appearance showed him weak and anaemic, his pulse being 90 degrees, his temperature 99.6. He had no appetite and his bowels were very loose. He was ordered six grains of the bi-sulphate of quinine every three hours and put upon milk diet. At 6 p. m. his temperature had risen to 102 degrees.

On October 28th, at 9:30 a. m., his temperature was 102 degrees, pulse 120, treatment was continued. At 11:30 a. m. he was seized with an epileptiform convulsion. When I saw him at 12:30 he was in a comatose condition, pupils widely dilated, Cheyne-Stokes respiration, spastic rigidity of extremities, reflexes

abolished. A question of diagnosis arose. The patient was catheterized, four ounces of urine were drawn. Examination showed specific gravity to be 1.022 with an acid reaction. No albumen or sugar was found. The blood was not examined at this time.

Dr. John A. Murtagh, acting assistant surgeon, U. S. army, saw the case with me and a review of the history and presenting symptoms resulted in a diagnosis of pernicious malarial fever. Hypodermic injections of quinine, seven and one-half grains every two hours, Warburg's tincture, one-half a fluid ounce every three hours by mouth were ordered, also milk and whisky as much as could be borne. The urine and faeces were passed involuntarily. Temperature at 3:30 p. m. was 104.8 degrees, at 6:30 p. m. 105 degrees, pulse 140, at 10:30 p. m. 106 degrees. Sinapisms to nape of neck and ice bag to head were continued through the night.

On October 29th was seen at 7 a. m., had been restless all night until the last hour, when his temperature had fallen to 101 degrees, pulse 116. He now moans and throws his extremities from side to side, so much so that he must be restrained by the nurses. Passes faeces and urine involuntarily, swallows liquids readily when placed in his mouth. Treatment continued, no rise in temperature. Temperature at 12 p. m. 100 degrees, pulse 108.

October 30th was seen at 7 a. m. Had slept since 3:30 a. m., when temperature was 99 degrees and pulse 90. He takes nourishment from cup and answers questions in an absent way, but improving rapidly as to his mental state; treatment continued.

October 31st, temperature and pulse normal, is perfectly conscious, and wonders what has happened. His condition is excellent. He is given light diet and quinine bi-sulphate six grains t. i. d. per mouth, which was continued until discharged.

The man was returned to duty on November 7th, cured, and rejoined his regiment. While under treatment at this hospital, this man had twenty-eight seven and one-half grain injections of quinine bi-sulphate, also seven one-half ounce doses of Warburg's tincture. I believe it saved his life.

Uterine Headaches.—In the course of an article on headaches, in the November *Columbus Medical Journal*, Dr. John Inglis recommends cimicifugin in rheumatism of the womb; caulophyllum when there is menstrual spasm; pulsatilla for menstrual headache when the patient is pale and nervous and menses scanty; and helonias when there is a feeling of uterine weight and dragging, causing great mental irritability.

SCARLET FEVER.*

By JOHN T. CHAPMAN, M.D.,

Selma, Alabama.

Gentlemen:—It is with no little diffidence that I offer this society a paper on a subject that has been considered by men of more ability and experience than I can boast of. I do not promise to bring you new and interesting facts, but all of us are looking and longing for them. Yet, by each of us bringing the fruits of his labor and offering it on the altar of the profession, we will reach the goal for which we are striving.

Every statement, proposition or theory in any department of medicine, before it can be reckoned among settled facts, must be submitted to a calm and judicious consideration publicly and openly, before the medical profession. Therefore, if this paper elicits a full and frank interchange of expressions, it will have fulfilled its intended mission.

Scarlet fever is an epidemic and contagious eruptive fever, characterized by a scarlet rash, which appears on the second or third day of the disease, and ends usually about the sixth or seventh, or, in some cases, so late as the tenth; by simultaneous inflammation of the tonsils, the mucous membrane of the mouth, pharynx, and by desquamation (Osler).

The forms of the disease generally enumerated by the English author are the simple, anginose and malignant. Authors differ widely in their description of these forms; many of the English authors include in the simple form, only the cases in which there is no affection of the fauces, while the anginose form include all in which there is any throat affection whatever. M. Rayer, on the contrary, describes, under the head of the simple form, the cases in which the throat affection is mild, while he considers the anginose form to be that in which a pseudo-membranous angina occurs. Again the description of the malignant forms are vague and uncertain, some including under this term only the rapidly fatal cases in which cerebral symptoms are present, while others include those also which are rendered malignant by the occurrence of pseudo membranous angina.

As to the simple form that the English writers tell us of, or that in which there is no anginose affection, it has no existence so far as my experience goes. In all cases that I have had, the inflammation of the mucous membrane of the fauces constituted an essential element of the disease. I have never seen a case of

* Read before the Tri-State Medical Society.

scarlet fever where it was not present to a greater or less extent. It is often very slight, so slight, indeed, as to be unaccompanied by any evidence of pain in the part, but in all cases that I have seen it has been decided and obvious. The two other forms usually described, the anginose and malignant, are also of little value. I like the classification regular and rare or grave, as applied by the Cyclopaedia of Diseases of Children, and shall speak of them in their classification. Until Sydenham established the unity and specific nature of scarlet fever it has been considered a variety of measles, differing only in the form of eruption. How, when or where it originated are questions which cannot be answered.

During the past two hundred years its prevalence has gradually increased, until its presence is noted in nearly every continent. It has gradually assumed a more dangerous form, until now it is the most prevalent and fatal of the exanthematous maladies.

Scarlet fever is due to a specific poison capable of reproducing itself. That such a contagion exists possessing the power of infecting persons with a disease similar in all its essential characteristics, and that every such case is the result of such infection, cannot be doubted. It is true that cases occasionally occur independent of any epidemic, and, apparently, of any contagious element, but such cases, like those occurring under circumstances explained, are due to the infection with the scarlatinous poison. The failure to establish the origin of such cases and to connect them with the specific contagion is partly due to defective methods of investigation, but mainly to the specific qualities of the contagion, which characterize it as a volatile, diffusible, portable, minutely divisible, and tenacious poison, possessing a vitality and latency which permits its transportation to great distances. The further fact that the contagium of such sporadic cases will always produce the disease in unprotected persons seems conclusive against their spontaneous origin.

As an illustration, to show these are facts, and are borne out by clinical experience, I give the history of a sporadic case that occurred in Bessemer, during the fall of '92. A child three years old was attacked with scarlet fever. The disease assumed the graver or malignant form, cerebral symptoms developed on the sixth day, death a few hours afterward. There were no other cases in Bessemer, Birmingham, or surrounding country, so it was concluded to be a sporadic case. Some six months afterwards the grandmother of the child visited Alabama. In speaking to her of the little fellow, she remarked, that about a year before the child died, she lost another grandchild at her home in South Carolina with scarlet fever. It being winter, they

used on the beds blankets and quilts; this bedding had been thoroughly aired, and washed. She broke up housekeeping later, and this bedding had been sent to her daughter, the blankets had been used on the little fellow's bed, hence the contagious element. While treating a case which developed into scarlet fever, taking all the precaution that I thought necessary, that was brushing, airing clothing, and subjecting myself to sulphur fumes (with clothing on in a room where windows and doors were closed) for twenty minutes each time after visiting the patient, I carried the contagious element home and planted it in the system of my little boy, three years old. His case was of the regular form. The parotid and sub-maxillary glands became affected, while the glands had degenerated into a cheesy mass; there was no discharge from an incision sufficiently large to have drained the sack. The inflammation of the surrounding tissue was to such an extent, and the tension of the parts so great (after this incision) that the glands had to be removed. At the time of the operation his temperature was 105 degrees; three hours after same he was resting nicely and his temperature had fallen to 101. The wound was treated by packing with iodiform gauze, and washing it out every day with warm water; the treatment, in fact, was as any other surgical wound. The little fellow's improvement continued until ten days after operation, when all signs of the disease had disappeared.

It is thought that domestic animals may contract the disease and thus be the source of direct contagion. I doubt this materially, as this is an eruptive disease, caused by a specific contagion, affecting the skin of the higher order of animals, or men, where the skin is not protected by a heavy coating of hair. I base my reasoning from the fact, that I have never seen the desquamation on the scalp. Although these animals might be the means of carrying the poisonous element to unprotected persons, by the specific contagion from affected persons accumulating in the hair of the animals. It may also be disseminated by contaminated drinking water, and it has been quite frequently attributed to milk. But the most common mode of infection is from direct contact with a scarlatinous patient.

The nature of the contagion has not been determined. Experimental and clinical observations point to the existence of a scarlatinal microbe, but such an organism has not been isolated or demonstrated.

Recent experiments and investigations by Klein, Edington, Jamieson, and others, point very distinctly to the existence of an organism peculiar to scarlet fever.

"A number of organisms have been discovered in the blood and desquamation, and some of them have been isolated and cul-

tivated. The indications are that the bacillus scarlatinae which consists of rods measuring 0.4m in thickness and 1.2m to 1.4m in length, most usually forming excessively long-pointed and curved filaments, is the special cause of scarlet fever." "But controlled experiments of sufficient magnitude have not been made to establish the fact" (Keating). The eruption sometimes disappears entirely after death, and, on other occasions, assume a deep livid or purple appearance. The epidermis is generally loosened upon the integument, so as to be peeled off with great facility. The most important lesions, and those which seem to belong to the nature of the disease independent of complications, are the altered condition of the blood, and congestion of the different parts of the body, particularly the brain, serous membranes, kidneys, spleen, glands of Peyer, and the intestinal follicles.

There is rarely any unnatural amount of serous effusion into the ventricle or meshes of the pia mater; and it is evident that the symptoms have been due entirely to the vitiated condition of the blood. Nevertheless, effusion in the cranium may exist. The condition of the skin resembles the congestion of the subepithelial layers, with excessive formation and subsequent desquamation of the epithelium, the rete mucosum being thickened, with a formation of numerous round nucleated cells, and the sudoriferous glands being often obstructed by the rapidly formed cells. The glands of Brunner and Peyer are not unfrequently enlarged, and they are sometimes reddened or softened.

The kidneys in the first week of the disease show an increase in the number of nuclei in the Malpighian bodies, hyaline degeneration, and multiplication of the nuclei in the muscular coat of the minute arteries, swelling, and increase of the nuclei of the epithelium. After first week the changes noticeable are infiltration around the tubules, and tubal-nephritis, the tubules being crowded with hyaline cylinders and the epithelium presenting fatty degeneration. The heart occasionally presents the result of inflammation of its lining or investing membrane, (Hare). It is almost impossible to distinguish scarlet fever from the other eruptive fevers by the symptoms which precede the eruption. The only sign upon which a diagnosis at that time might be guided are great frequency of pulse, which is characteristic of the disease, some soreness or redness of the throat, and the prevalence of the disease in the community. These are exceedingly fallacious, and the physician should be content to wait for the eruption before he decides with certainty his diagnosis. When the eruption makes its appearance it can scarcely be mistaken for any other disease. The regular form generally results in the

suppuration of the glands and convalescence. The malignant or graver result in cerebral symptoms, and death. The treatment is the supportive treatment. Strychnine in the later stages is often beneficial. If there is very much swelling, with tension in the glandular region, they should be removed and treated as any other surgical wound. The sequelae are numerous and play an important part in the complete recovery of the patient. The most prominent of these are those effecting the kidney, the nervous system and the heart.

Nephritis demands special care. It cannot be said that every death attributable to this complication is due to the neglect of the medical attendant, but it is true in much the larger number of cases. The cases in which marked diminution in the quantity of urine occurs, whether or not attended with any other symptoms of renal disturbance, demands prompt attention.

If simply from higher temperature, the reduction of same with an increased abundance of fluid may suffice. The flushing of the kidneys by increasing the consumption of some pure drinking water, such as the Waukesha or Polinaris, is not only valuable as a remedial measure, but will also, to some extent, prove preventive of renal complications by dilution of the concentrated urinary filtration. The danger of scarlatinal nephritis lies mainly in the failure or arrest of the emunctory functions of the kidney, and, consequently, uraemic toxæmia. The indication, therefore, for treatment must refer to the promotion of elimination by the skin, the bowels and kidneys. Diaphoresis may be promoted by steam, hot air, or hot air bath, or in extreme cases the hypodermic of hydrochlorate pilocarpine. In addition to the diaphoretic measures, prompt attention should be given to the bowels, and unless contraindicated, free purgation should be induced.

Nervous complications, such as chorea, sudden convulsions, followed by heomiplegia, two cases of progressive paralysis of the limbs with wasting are reported by Osler. Occasionally we have mania and melancholia, all the result of scarlet fever.

Restlessness, sleeplessness, and other mild nervous disturbances will frequently yield promptly to bromide of potassium; convulsions, especially in the early stage, may be controlled by it. In the acute stage of scarlet fever, the cerebral and nervous disturbances are so generally associated with the febrile condition that their proper treatment refer to the management of the temperature, and such measures as will reduce the fever will generally control them. Nervous complications, such as enumerated, are best treated by keeping the patient in the recumbent position, giving the bromides to control nervousness. Tone up the system with strychnine and good nutritious diet.

Simple endocarditis is not uncommon, and many cases of chronic valvular disease originate probably in the latent endocarditis of this disease; malignant endocarditis is rare. Pericarditis is probably not more frequent, but is less likely to be overlooked than endocarditis. It usually develops during convalescence, and may be sero-fibrinous or purulent. The cardiac complications are sometimes found in association with arthritis and myocarditis and is quite often present in this disease. These are best treated by digitalin and strychnine.

A rigid but proper dietary should be adhered to until the disappearance of all complications. The patient should be confined to the house, and perhaps to the sick chamber; all exposure of the person in sudden inclement changes of the weather should be avoided. The nutrition of the patient is very important, and the employment of such tonics (especially iron and quinine, and perhaps alcoholic stimulants) as may be necessary to support the patient and to obviate fatal exhaustion.

RENAL INSUFFICIENCY INDEPENDENT OF ORGANICALLY DISEASED KIDNEYS.*

By W. H. CAMPBELL, M.D.,
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Mr. Chairman:—I have chosen for the subject of discussion to-night "Renal Insufficiency Independently of Organically Diseased Kidneys." As renal insufficiency may be considered a very common source of a certain kind of infection, and as this subject is very closely connected and associated with infection, I shall first direct my remarks to the phenomena of infection, taking up my subject later on.

Before proceeding, however, I should like to offer an apology for the paper, as the subject opens up such a vast field that it will be impossible to do it justice in all its various phases in a paper of this character. I shall, therefore, have to be contented with speaking of the more salient points, leaving out much that would be of interest if the length of this paper would permit.

The definition of infection, according to Dunglison, is "material essential to and concerned in the propagation and spread of communicable disease—process by which disease is communicated to an individual by diseased germs from the external atmosphere." It seems to me that infection might better mean any

*Read before Pueblo County Medical Society, Nov. 15, 1898.

morbid condition resulting from the entrance into the system of toxic materials or, in some instances, by the microbes themselves, as it is plain enough that one may be infected by material that is neither germs nor communicable to other individuals. Modern pathology and bacteriology have made great strides in the last few years and have led some observers to believe that all, or nearly all, diseases are either produced by some specific microbe or by their presence they stand in a causative relation to the morbid process and are necessary to its evolution and development. It is not yet fully settled how the bacteria act upon the living tissues. By some it is supposed that the symptoms of infection are produced by a chemical substance which they elaborate as a sort of specific excretion. Others believe that the phenomena of infection are produced by changes brought about in the tissues by the organisms during their growth and that it is not necessary to assume the development of a particular virus or chemical substance. However, these substances, or whatever they may be, are diffused throughout the body and owing to their action on the tissues greatly increase tissue-metamorphosis and also act on the thermic centers, producing fever and constitutional symptoms. The point I wish to make is that it is these poisons in the tissues, or circulating in the system, that eventually we are called upon to combat in the treatment of infectious diseases, and it matters not whether these poisons have been eaten, breathed, absorbed, or elaborated in our own system by or without the aid of microbes.

Infection is one of the most absorbing topics of the healing art of to-day. The enormous range of surgical infection is strewn with tragedies. A large portion of a surgeon's life work is devoted to dealing with complications arising from septic absorption. His satisfaction in his cures is secured only when he is certain that they have escaped it. Infection in medical cases has been studied in every possible direction, every new text book contains further and greater investigation in each particular kind of infection which its immediate predecessor of only a few months earlier failed to record. The medical world is aroused in the pursuit of these inquiries. The last quarter of the present century will have created a monument to medical advance whose equal has never been produced. The era is just dawning upon us wherein a line of infections, as old as the human race, are about to receive the attention of the medical world. They are the auto-infections. They have as yet received very little consideration. They enter most largely into the causation of death, because they are almost always present in all fatal cases wherein traumatism has not acted apart. Toxic materials always reside in the human

body. Among them are the poisonous alkaloid-like ptomaines, due to decomposition, Lencomaines, which result from tissue-metabolism independent of bacteria, and various other toxins. Some of these constitute the waste products of living beings. So long as they are plentifully excreted death is postponed. The skin, the pulmonary mucous membrane, the bowels and kidneys constitute the avenues of escape of toxic material from our bodies. If one of these emunctories be crippled disease may result. The physician who busies himself with seeing to the proper performance of excretion of any one of these emunctories deals with the beginnings of disease. It may be far removed from the organs whose departure from the healthy action must be held responsible for what he treats, as in gout or rheumatism.

The chief sources of auto-infection are the tissues, the secreting organs, foods and putrefaction. All the excretions contain poison—faeces, urine, bile, carbonic acid and sweat are poisonous. Among these we find ammonia compounds, biliary acids, indol, phenol, skatol and urea, which, next to carbonic acid, is the most important excrementitious matter. Even the blood is toxic, for it is continuously being traversed by a current of toxic material. In health its elimination is incessant. It is said that if its excretion is interfered with so that it becomes $2\frac{1}{2}$ times greater than its normal quantity, it will produce death. I desire to call attention to only one of these emunctories in this paper, and that is the kidneys, and only to their insufficient work independently of their organic disease. Persons with sound kidneys are alone referred to. Concerning them this declaration is laid down: Very many persons suffer greatly from renal insufficiency and properly selected diuretics will relieve many of their symptoms. Urine is composed of water and certain solids dissolved in it; the amount of solids are proportionate to normal body weight. This proportion is fairly constant, enough so to constitute a safe working base. If the solids are excreted in sufficient quantity a normal condition exists. If they fall short of it, say 20 per cent., an insufficient quantity is excreted, a condition called "renal insufficiency." To arrive at a more definite conclusion, it is said that a person weighing 180 pounds will excrete 1100 gr. of solids daily, one weighing 90 pounds, one-half of 180, will excrete 500 gr. It is an easy matter to estimate the amount of solids persons with an intermediate weight would void. To estimate the urinary solids is an extremely simple matter. Various working formulas exist for estimating solids. Innumerable articles have appeared in the past on the methods of estimating urea. The formula herein recommended is known as "Haines' Modification of Haeser's Method." This method includes all the solids, as well as urea.

Its simplicity and speedy solution relieve it of all the objections belonging to all formulas relating exclusively to estimating urea. It is this: Multiply the last two figures of the specific gravity of the urine by the number of ounces voided in twenty-four hours, and the product by 1 1-10, thus, if the amount of urine voided in twenty-four hours be 36 ounces, and its specific gravity be 1021, the formula would read 36 times 21 times 1 1-10, equaling 831, the number of grains of solids contained therein.

Should we wish to estimate urea separately, that is quite another matter, requiring time and delicate chemical manipulations. This advantage exists in favor of estimating the amount of solids that if there are insufficient solids excreted unquestionably there is a deficiency of urea excreted also. Renal insufficiency is, in the opinion of the author, an extremely common disorder. It may be encountered at any period in life. Naturally two well-defined forms exist. First form would include those where the activity of the kidney is sluggish, the second form those where the organ's normal activity is insufficient to perform the work—the extra work, it may be, of some of the other excreting organs. Unquestionably we all suffer from this affection at times, as it is indicated according to some authors by nervousness, dyspepsia, bronchitis, and neuralgia. Seven years ago, Bond (*American Journal of Medical Science*, September, 1891,) attempted to show that serous membranes are liable to take on inflammation in patients with renal insufficiency. He would see in patients who had recurrent attacks of pleurisy, one who retained too much urea. Confirmatory of this idea are the recurrent pleurisies so often encountered in patients who die from chronic nephritis. Also in chronic nephritis we often have the symptoms of repeated attacks of bronchitis with profuse secretion, their breath often has the odor of urine, indicating that such patients are trying to excrete urinary solids through their pulmonary mucous membrane, or, to be more tersely stated, it might be said that such patients are attempting to urinate through this channel. We also have a severe form of diarrhoea in uraemia where the same may be said of the intestinal mucous membrane, as regards the pulmonary mucous membrane. In cases of acute cold the powerful diuretic effect and relief obtained from a 10-grain dose of Dovers powders, or small hourly doses of nitre, would seem to indicate a temporary renal insufficiency.

A lecture given at Rush Medical College, by Jos. H. Etheridge, on this subject, relative to female disorders, contained in part the following: "Urinary solids are a lethal poison when retained in sufficient quantities. The amount of poison in human urine required to kill is secreted by healthy persons in two and

one-sixth days. Like other poisons, their effect depends upon dosage. If the dose be small the effect is inconsequential; if large the patient may have uraemic convulsions, if very large may succumb. To kill a man of 132 pounds requires one pound of urea. Such a man manufactures 302 grains of urea daily, therefore, to be killed by his own product of urea it would require 19 days of non-elimination." He further stated: "It is a matter of daily experience to see gynecological patients who present amenorrhoea, neuralgia, pelvic peritonitis, bronchitis, cutaneous eruptions, headaches, backaches, leucorrhoea, nervousness and insomnia."

Bouchard, throughout his numberless experiments, has recounted many curious facts concerning the toxicity of urine. The poisonous action of urine excreted by day during the period of cerebral activity produces a different effect from that excreted during sleep. Day urine is more poisonous than night urine, it causes convulsions. Night urine causes coma. Man elaborates two and one-fourth less poison during sleep than during an equal time of cerebral activity. Transfusion of urine lowers temperature. We often encounter subnormal temperatures in patients with renal insufficiency. Depressed temperature retards tissue-metamorphosis which, in turn, increases auto-infection. We further learn by his experiments that urea, the coloring and other organic substances supply two-thirds and potassium salts one-third of the total toxicity of urine. In describing the action of these poisons on the various tissues and organs, the nervous system seems to suffer first and most severely. Long before coma or convulsions are seen an interesting array of minor nervous manifestations must necessarily exist. Next to the nervous system would come serous membranes. Other tissues may be invaded by urinary solids, and I suppose are. To decide this, positively, would involve a chemical analysis of the tissues presenting symptoms that may be alleged to arise from urine poisoning, and that has not been done so far as my reading extends, but as diuretics increase the amount of solids excreted and at the urgent symptoms subsiding this would seem to indicate that they are called in from the tissues that do not contain them normally. The treatment I would suggest for this condition would be lithia and small doses of mercury, its diuretic action is well known when given in small doses, say one-fourth grain of calomel night and morning when the treatment is to be of short duration; when it is to be continued for longer periods this dose should be reduced to one-twentieth grain. Laxatives, when this action does not follow from the calomel. Occasionally a cathartic would be indicated. Flushing the kidneys with an abundance of good, pure

water is of great value in these cases. When other excreting organs are at fault, and the kidneys are already over-worked, they should receive proper attention in order to relieve the over-taxed kidneys.

The aim of this paper is solely to call attention to one line of treatment that has been somewhat neglected, and to invite observations and original suggestions.

CREOSOTE IN PHTHISIS PULMONATIS.

By L. H. WARNER, M.D.,
Brooklyn, New York.

Creosote was discovered by Reichenbag in 1830, and is one of the products of the distillation of wood separated from tar by fractional distillation. The best product is obtained from beech wood, and has a specific gravity of 1067, and distills at a temperature of 200 degrees to 210 degrees C. (392 degrees to 410 degrees F.). Its physiological action internally is anaesthetic, antiseptic and astringent. It has also expectorant powers and is principally excreted by the kidneys.

Creosote has been administered in pill form, raw or diluted with rum, wine, cod liver oil, in emulsion, hypodermically, diluted with water, by inhalation, and by rectal injection. It has a tendency to arrest fever and check diarrhoea, it is rapidly absorbed, and it has been proven that under its administration the tubercle bacilli disappear from the system. Creosote contains from 60 to 75 per cent. guaiacol, and as the latter is more agreeable in odor and taste it has been suggested by many to employ it in place of creosote. Guaiacol has a tendency to reduce hectic fever and night sweats, but if given in too rapidly increased doses it enfeebles the organism by retarding the heart's action and breathing. Guaiacol is most effective in its action on tubercle bacilli. It is antiseptic, astringent, styptic, anaesthetic and an escharotic. In the treatment of phthisis the administration of creosote causes the fever and cough to diminish and the patient to improve in appetite and flesh. On examination of the pulse it will be noted there is a smallness and rapidity indicating an increased anaemia produced by the powerful action of creosote. When creosote alone is used life is made more comfortable to the patient, but it causes an earlier termination. If in combination with tonics, less anaemia is produced. It has antifermentation powers, and though it

may not kill bacteria, it destroys their ptomaines and renders their action non-toxic and inert. In the stomach of consumptives a pathological fermentation is at all times going on, and this process is overcome by the action of creosote. It takes oxygen from the blood, and is changed into carbolates and oxalates, as a result of oxydation, thus causing the blood to assume a deeper color. In the treatment of phthisis it becomes of especial value if reinforced by nuclein. Nuclein increases the number of white blood corpuscles and is therefore a valuable agent in combating tuberculosis in its initial stage. Reviewing the afore mentioned facts, we have creosote, guaiacol, nuclein and tonics as factors in the treatment of phthisis pulmonalis. How and in what proportion can they be best combined to become efficient in the treatment of this disease. Beef, milk and wheat peptonized with creosote and guaiacol, otherwise known as liquid peptonoids with creosote, is an eligible method of administering the above in combination. Each tablespoonful contains two minims of pure beechwood creosote and one minim of guaiacol combined with the nutrient, and constituent properties of liquid peptonoids. In two different hospitals the entire consumptive wards were placed on this remedy with most excellent results and it will be necessary to quote but a few of the many cases had under observation:

Case 1. M. P., female, aged 49, admitted to hospital June 2, 1898, family history tubercular. For some years patient has been troubled with severe attacks of cough, resulting from an attack of la grippe in 1894. Has dry hacking cough, with gelatinous expectoration, containing bronchial and alveolar epithelium in a state of fatty metamorphosis, streaked with blood. Temperature 101 degrees. Loss of appetite and dyspeptic symptoms. Inspiration of cog-wheel character, expiration high pitched and dullness on percussion. Patient has lost about 30 pounds within last few months. Weighed on January 2nd 145 pounds. Blood count, 45 per cent. Haem, 3,000,000 red cells, 7,500 white cells. Treatment began with one tablespoonful doses of liquid peptonoids with creosote every four hours. Patient slowly improved and on June 16th doses were doubled to two tablespoonfuls every four hours. Hereafter a rapid improvement took place. July 1st patient's cough has disappeared, no bacilli in sputum, appetite good, weight 151 pounds. This treatment was continued till July 26th, when patient left the hospital, apparently well. Weight 155 pounds, blood examination Haem 62 per cent, red cells 3,650,000, white cells 7,200, no cough, good appetite.

Case 2. E. W., male, age 20, family history tubercular, admitted June 9, 1898, hacking cough, purulent expectoration, temperature 100 degrees, night sweats, loss of appetite and weight,

blood examination 43 per cent. Haem, 2,700,000 red cells, 7,000 white cells, weight 98, examination of sputum bronchial and alveolar epitheleum, bacilli. Same treatment as in case 1, began June 9. Patient improved. June 26th coughs but little, no bacilli in sputum, appetite good, weight 103 pounds. July 13th discharged, apparently well, no cough, no night sweats, appetite ravenous, weight 105 pounds, blood count. Haem 61 per cent., red cells 3,600,000, white cells 6,800.

All tubercular cases under my observation improved under this treatment, while others under plain doses of creosote gtt V to XX showed but little improvement.

SURGERY AND RESULTS, BY A COUNTRY PRACTITIONER, WITH CONSTANT IRRIGATION IN THE TREAT- MENT OF SEPTIC INFECTIONS.*

By C. S. HOSMER, M.D.,
Nephi, Utah.

Mr. President and Members of Utah State Medical Society:

In submitting this paper for your consideration I do not intend going over the whole field of surgical procedure, but to outline some of the surgical difficulties and experiences which the country practitioner has to meet, also dwelling briefly on the treatment of the various septic conditions by constant irrigation; not claiming any originality except in the different modes of application in some of the cases which I now briefly describe.

Case 1. July 16th, '96, I was called six miles up Salt Creek canon to see R— J—, age 64 years, who, in an altercation over water rights, was shot an hour before by a 45-70 Winchester rifle, at close range, probably two feet. Ball entered about an inch above the anterior superior spine of left ilium, supposedly entering abdominal cavity, passing backward and downward and out at fifth lumbar vertebra in median line. Advised operation, and the patient being at once brought to town, with the assistance of Dr. E. E. Wilcox, I opened up both back and front, found the ball had not pierced the peritoneum, also found three pieces of factory cloth, about 2x3 inches, in hole in transverse process of vertebra, blood clots, pieces of fat and bruised tissue, all of which were thoroughly washed out with sterilized salt solution, both back and front packed with iodiform gauze and externally

* Read before the Utah State Medical Society, Oct. 7, 1898.

dressed with acetanilid and sterilized gauze. After fourth day wounds were dressed every other day. Complete recovery without sequelae, no temperature, nor pus at any time.

Case 2. June 21st, '98, at 12 M., was called to see Mrs. R—, age 26 years, who, six weeks before had given birth to a healthy male child. Found her vomiting, purging, temperature 101 degrees F., pulse 98, had just had slight chill, had had slight pain in right side in region of appendix for three days. With history of two previous attacks I at once explained probability of appendicitis. Was unable to again see her until next night, at 10 p. m., found her still vomiting, bowels checked, temperature 103 degrees F., pulse 130, just had severe chill, advised immediate operation, which, with the assistance of Dr. E. E. Wilcox, was done at 2 a. m. same night. Found appendix enlarged, shortened, adherent, containing about a drachm of pus and three minute openings in distal end. Removed appendix in usual way, washed out abdominal cavity with sterilized salt solution, closed the opening and patient made an uninterrupted recovery. Both these operations were done in small two-roomed adobe houses, with no conveniences whatever.

We, as country, general practitioners, follow the plain, simple ways of common sense in our surgical work. We are often stunned by the numerous groups and very learned scientific names into which the great germ family is divided and by which they are designated and the numerous questionable antiseptic preparations for their destruction. We place the whole germ family with the dust and ptomaines with which they mingle in one group and designate it dirt, which, after boiling a sufficient length of time and with plenty of hot water, soap, permanganate of potassium and oxalic acid and, possibly, alcohol in the preparation of our patient and ourselves, we are justified, by our results, in concluding that the conditions are as nearly aseptic as would be possible by the use of all or any of the various antiseptic solutions, including bichloride or carbolic acid, all of which have been proven to be more or less injurious to the various tissues of the body.

I believe in simplicity in every surgical operation—least possible furnishings should be in the operating room or the room of the patient, smallest number of assistants, smallest number of instruments, perfect quietude, as nearly as possible, and simplest effective asepsis.

Case 3. On August 25th, '96, was called to Mona, Utah, to see G— G—, age 36 years, who, thirty-six hours before while shoeing a horse, accidentally let a small knife blade, two and one-half inches long, enter inside of right thigh, about midway be-

tween knee and groin. I reached him about 11 p. m., found him in a small room of a two-roomed adobe house, raving like a madman with six or eight men trying to keep him in bed, temperature $105\frac{1}{2}$ degrees F., pulse 128, whole leg swollen about as large as possible and pain indescribable. At once placed him under chloroform, made small opening where blade entered, introduced index finger, found a thick greenish pus extending for a distance at least six inches along and nearly surrounding femur. Considering free drainage absolutely necessary, I made an opening from first incision downward and outward at junction of middle and lower thirds of thigh, another from first incision upward and outward at junction of middle and upper thirds of thigh. Took a No. 10 stomach tube (all the drainage I had with me), cut it in two pieces, making several openings along tube and introduced one in each channel made, flushed the part thoroughly with weak permanganate of potassium solution and left patient feeling quite easy. Next day arranged device whereby we kept a very small stream of weak permanganate of potassium solution running through the tubes all the time, except at three different times during the twenty-four hours we would envelope the whole leg for two hours in a pack of hot steamed hops, gave patient stimulants and easily digested, nourishing food and kept bowels, kidneys and skin active. Patient continued to improve from the first and made a complete recovery.

Case 5. On April 15th, '96, was called to Burbank, Utah, 200 miles southwest of Nephi, to see G. W. L——, age 60 years, who, eight days before while trimming apple trees with a pair of pinchers, pinched the palmar surface of third finger of left hand at second joint with handle of pinchers, causing ordinary blood-blisters, which caused him no trouble until two hours after he opened blister with pocket knife to allow blood to escape. Pain and swelling began almost immediately. He described pain as being in the bone. Swelling extended up arm so that within 24 hours the whole arm was swollen out of all proportion. I found him on the eighth day lying on his back, vomiting very often, muttering to himself, unconscious of everything taking place around him, with arm lying at his side in flaxseed poultice. He had had no sleep for several days and nights, and, in fact, was as nearly dead as a man cares to get. I found flesh on finger just ready to drop off and whole hand and arm very badly swollen and discolored. I at once amputated finger, put several drainage tubes through hand and arm and placed whole member into a bath of warm water. In twenty minutes he was sound asleep, slept about forty minutes very nicely, awoke, took a hot milk punch, which he retained, and was apparently conscious. We

kept arm and hand in bath most of the time thereafter, occasionally wrapping them in packs of hot steamed hops for a change, draining any new foci appearing, gave nourishing food and stimulants, kept bowels, kidneys and skin active. Patient made a complete recovery, except his little finger is still somewhat contracted.

Case 5. On October 3rd, '95, was called 12 miles north of Nephi to see J. S. S——, age 35 years, who, about 48 hours before, while gathering cornstalks off the ground felt something sting him on palmar surface of third finger, third phalanx, left hand, or as he supposed at the time some of the dry stalks had pricked him, and went on at work, but in about five minutes the pain was very severe, finger some swollen and he felt a little dizzy. After a short, unsuccessful search for what had stung him, he walked to the house, a distance of about 80 rods. On reaching the house he was faint and suffering great pain and soon became unconscious. His mother being with him and, being somewhat peculiar, did not send for help. When I arrived I found him unconscious, high fever, very rapid pulse, breathing rapidly, hand and whole arm badly swollen, hand and forearm black, with large watery blisters over their surface. I lanced finger, put several drainage tubes through hand and forearm and placed whole arm and hand in a weak warm permanganate of potassium solution. Restlessness, which had been very severe during whole time, quieted very soon, patient rallied, became conscious and soon had a refreshing sleep, after which he took nourishment and large amount of brandy, nicely. I kept the arm in bath several days, occasionally changing solution, but temperature and pulse continued about the same and patient gradually became weaker, flesh on arm and hand began to show signs of sloughing when, on the 9th, I amputated arm at shoulder; wound healed nicely, except at upper edge there were a few drops of pus, which were easily controlled; temperature and pulse gradually became normal, patient taking nourishment nicely and so far improved as to give some orders about work on the place, when, on the night of the 22nd, began to vomit a large amount of greenish material and died in a few hours. From the various symptoms and the condition of the infected hand and arm, I believe, as did the patient, this man was bitten by a rattlesnake.

During the fall of the year when it is dry and dusty, when men are gathering fruit, threshing grain, getting wood, etc., we very frequently meet with the minor septic troubles, mostly confined to hands and fingers.

From my experience I find this condition much more frequent in this state than in some of the eastern states. My treat-

ment is free incision, burning out with carbolic acid and application of cotton saturated with equal parts of turpentine, camphor and olive oil.

Experimental studies of wound infections are carried out with difficulty because the existing causes of the infection do not operate the same upon animals as upon man. It is interesting that the bacteria, which cause the wound inflammation in the horse, cow or other animals are different from those which cause inflammation in man, and each species of animals seem to have a peculiar variety of bacteria of its own.

In these various septic conditions, the etiological factor and the pathological changes resulting therefrom are involved in doubt, which even the advances in bacteriology have not cleared up satisfactorily. The pyogenic staphylococci and streptococci, however, are by far the most common causes of suppurative affections, although the number of different species of bacteria, particularly of bacilli, revealed by systematic study, is much greater than was formerly supposed. It is also clearly demonstrated that it is not necessary to have bacteria present to produce inflammation and suppuration, as ptomaines, chemical poisons, etc., may produce the infection. In conclusion, I submit, that the ordinary measures employed fail in a good proportion of cases, even when reinforced by stimulants, and tonics, which is attested by the number of deaths from infected wounds of fingers, hands, arms, feet and legs, which occur in the practice of able surgeons; and that by the intelligent employment of constant irrigation we will in a large majority of cases save both life and limb.

By the constant stream we obtain the best drainage which is the great object in septic surgery and in submersion the diffusion process is into the water instead of the blood. Water, itself, is healing, and many forms of bacteria will not develop in a dilute watery medium. Moisture prevents drying of the secretions, relieves tension and renders the tissues soft. Heat retains life in tissues that otherwise would be lost and, lastly, pain is relieved, temperature and pulse reduced and consequently overcoming the depression of the patient's vital forces.

MILK AND "A MODIFICATION" AS A FOOD FOR INFANTS.*

By R. W. FISHER, M.D., Ph.G.,

Salt Lake City, Utah.

Infant feeding is a problem that is always with us, and if the old axiom is true that the success in treating a disease may be foretold by the number of remedies recommended for its cure, then this every day problem has not been answered even in part. Judging by the number of beautiful photographs in every periodical, of the infants who have grown fat on such and such a food, there seems no reason why any child should die from lack of the exact food that will be necessary for its individual requirements; yet we have cases where we go from one proprietary food to another until finally, if the child lives to go through the entire list, we call the case marasmus and tell the parents the trouble is with the child, that its stomach simply will not digest any kind of food and we give up trying, although, there is always a lurking suspicion in our mind that if we only knew the right food all would be well with the child. That this is true we know from seeing cases recover on certain food that we had given up as hopeless. With each new experience of this kind the hope comes that at last we have found the universal food only to be disappointed by its use in our next case. Some physicians say a child's chances of living is reduced fifty per cent. if it cannot nurse the mother. This is a fearful death rate, and we owe it to the sorrowing mothers of the land to use every method within our reach to reduce it. The profession has from the first set its face against the use of secret remedies and justly so, as how can we ascribe results to remedies the composition of which we at best have only an impossible formula? That foods have as powerful an effect as so-called drugs for either good or bad, can be demonstrated every day. We have left the feeding of infants to the non-professional mercantile firms or to nurses who are ignorant of the first principles of dietetics. This paper will only consider the food of healthy infants, and not discuss the modifications that are necessary in disease. The problem to be solved is to find a food that is cheap, easily procured, and that it shall resemble mother's milk. It is conceded by all that good mother's milk is the best possible food for the infant, and for this reason should be taken as a standard for comparison. To say that asses' milk comes nearest to this standard is true, but it does not fulfill our first requirement as the

* Read before the Utah State Medical Society, at Salt Lake City, Oct. 6 and 7, 1898.

supply is very limited and in the great majority of cases it would be impossible to procure it. We naturally turn to cows' milk as the supply is unlimited and the price within the reach of all; but we know from clinical experience and chemical analysis that it, unless modified, will not come up to our standard of mothers' milk. For comparison, the following is an analysis of human milk:

Fat, 3.4 per cent.; sugar, 6.7 per cent.; proteids, 1.2 per cent.; sp. g. 1028-1034; total solids, 12-13 per cent.; reaction slightly alkaline.

If we compare this milk with the average cow's milk we have:

Fat, 4 per cent.; sugar, 4.50 per cent.; proteids, 4 per cent.; total solids, 14-13 per cent.; reaction slightly acid.

The difference between the constituents of the ash of human milk and that of cow's milk is that in cow's milk there is more lime, magnesium, potassium and three times as much phosphoric acid and less chlorine and sulphur. The striking difference in the above analysis is that in cow's milk we have three times as much proteids as in human milk and the sugar is as 4.50 per cent. to 7 per cent. The fat is in about the same proportion in both cases. Chemically the sugars are identical and the fats differ but slightly, but when we come to the proteids we have a great difference, and it is here we experience our greatest difficulty in securing a proteid or a combination of proteids that will resemble that found in human milk. The proteids in cow's milk are caseinogen and lactalbuminates. The lactalbuminates are albumin, globulin and peptone. Blyth gives the proportions and compositions of the proteids as follows:

Casein, 3.98 per cent.; albumen, .77 per cent.; peptone, .17 per cent.

Wiley says there is neither caseinates nor casein in human milk, but that it contains a special proteid body. Other authors call this proteid casein or caseinogen, but we know clinically that it differs from that found in cow's milk in that it does not coagulate in so hard a curd in the stomach. It is this property of cow's milk that gives us the most trouble in feeding it to infants. Different methods have been proposed to overcome this difficulty, as by diluting by barley water, etc. But Rotch has shown by experiments that it is simply the dilution by the water and not the presence of the barley that prevents the large curds forming on the addition of acetic acid. There are milk laboratories in different cities of the country where the three constituents of the milk are separated and then combined in the same proportion as human milk or any other proportion that may be desired, to suit the in-

dividual case. The way in which this is done is to add the sugar of milk, cream and milk free of fat to water in the required proportions. This is certainly a great advance on our previous methods. I will not go into the history of this subject only so far as to give credit to Prof. J. F. Meigs, who found by clinical experience that certain proportions of cream, milk, lime-water and water agreed with a great number of infants. On analysis this mixture was found to contain about one per cent. of proteids but lacking sugar as compared with human milk. Dr. A. V. Meigs added the required sugar and the "Meigs' Mixture" has been in use a great deal. In all the combinations it has been necessary to use caseinogen to make up the required amount of proteids or, in other words, the proteids are composed almost entirely of caseinogen while in mothers' milk there is no caseinogen, or at least it differs materially from that in cow's milk. If we could supply a proteid in place of the caseinogen that would not form a hard curd in the stomach it would be a great advance over our present method. This has been attempted by digesting the caseinogen and converting it to a peptome, but it is very questionable whether the peptome is absorbed in the same way as if it had been formed in the stomach, or even if this be true it is opposed to our ideas of the physiology of the stomach as we know if a function is not used it deteriorates. Is there no other proteid that we could employ? The remainder of the proteids after the caseinogen is removed is exactly suited to our use and we can utilize them by removing the caseinogen with rennet; in other words, by employing the well-known whey prepared by a special method. The action of rennet on milk precipitates the caseinogen as casein leaving the other proteids in solution. The method of preparing whey in general use makes it a very poor food as the proteids are entirely removed and then almost all the fats. Rotch gives the following: "One quart milk heated to 100 degree F., add 2 drms. ess. pepsin. When the proteids have been precipitated break the curds finely with a fork and pour off the fluid, straining through two thicknesses of cheese cloth." This, Rotch says, removes such of the proteids as are coagulated by acids. In this he is mistaken, as it only removes the casein, while the albumens that are still in solution, as I shall show later, are precipitated by acids. Then he says raise the temperature of the liquid to the boiling point but do not boil, and strain. By this method all the proteids are removed and with them most of the fat. Yeo gives the following: "Boil a pint of milk with one or two teaspoonfuls of lemon juice, strain through muslin." The same results would be procured by this method as that given by Rotch. Thompson gives the composition of whey as follows: Lactose, 4.65 per cent.; fat, .24 per cent.; proteids, .82 per cent.

The whey from which the analyses are made is generally taken from that left after making cheese and, as a consequence, is very poor, the object being to remove all the fat and proteids that is possible. If we are careful to make a rich whey a much different analysis will result. The following is an analysis that I made from a milk containing 3.8 per cent. fat, 9.91 per cent. solids not fat, Sp. G. 1.035. The whey contained: Fat, 2 per cent.; lactose, 4.50 per cent.; proteids, 1.03 per cent.; solids not fat, 6.89 per cent.; specific G., 1.028. This we see is much richer in fat as well as proteids.

In a number of samples of whey in which I estimated the fat it averaged two per cent. The great advantage is we have a proteid that will not form a hard, dense curd. Whey seems to be composed of all the other proteids with a small per cent. of very fine casein. On saturating it with magnesium sulphate a precipitate occurs. The filtrate contains an albumen which is precipitated by heat, nitric acid, hydrochloric acid, tannic acid, alcohol, mercuric chloride, but not by picric and acetic acid nor ether. The filtrate also contains a peptome-like body. If the precipitate left on the filter is washed with a saturated solution of magnesium sulphate and all the soluble albumen is washed out, the precipitate will dissolve in water and will give all the reactions for globulin. Whey, then, contains fat, sugar, proteids. The proteids being albumin, globulin and peptone. If the fine particles of casein are filtered out with the fat it leaves a clear whey. The precipitate that is caused by heating the whey is almost entirely dissolved by adding nitric acid or acetic acid and boiling. It is also dissolved by an excess of ammonia. The precipitates are always fine and flocculent. If 10 C. C. of the pure clear whey is boiled and a small amount of hydrochloric acid is added and the precipitate is separated by a centrifugal apparatus, the precipitate will amount to 2 C. C. in bulk. That even poor whey is a valuable food in some forms of disease is shown by the whey cures in Europe. The albumins begin to coagulate in whey at 120 degrees F. and are entirely coagulated at 170 degrees F. The proper method of preparing whey is as follows: To one-half pint of milk, heated to 90 degrees F., add one drm. of ess. pepsin, let stand till the casein is formed, then beat up with a fork and strain, being careful to press out all the liquid. We have a liquid that will contain one per cent. proteids, two per cent. fat and 4.50 per cent. sugar. To make up the required fat to 4 per cent. and the sugar to 7 per cent., the same as human milk, we would have the following formula:

Whey (2 per cent. fat) 8 oz. 2 drms.; cream (20 per cent. fat), 1 oz. 2 drms.; lime water, 4 drms.; sugar milk, 2 drms.

This resembles mother's milk, not only in the proportion of the constituents, but I am convinced that the proteids resemble greatly. In some samples of milk we would have to modify the above formula as it would contain too much fat. It is impossible to give a formula without first knowing the per cent of fat in the milk and the specific gravity as well as the per cent. of fat in the cream, but if we have this data we can supply a milk from which (except a small per cent.) the caseinogen has been removed, that will contain the required amount of proteids in a digestible form. I have said nothing of sterilizing, and have on purpose left this out of the discussion. The best method is not to heat the milk, as when you get above 130 degrees F. coagulation begins in the albumen. I know this is not according to the authorities as they say heating to 170 degrees or 165 degrees does not change the proteids, but this is easily demonstrated. If you have a pure milk, or if you can control the method in which the milking is done, there is no reason why the milk has to be sterilized. The curd will remove a great number of bacteria, but it is much better not to have them in the milk to begin with. As I before remarked, this paper discusses the feeding of healthy children only, so, for this reason, I did not recommend sterilizing the whey. When there is irritation or inflammation in the intestinal tract then a small number of bacteria in the food would do harm, but if the child begins healthy, or is restored healthy by the proper treatment, then the proteids that have not been heated over 100 degrees F. will nourish the child much better. I shall not tire you with cases, as a few dozen would prove nothing, but simply say that in my hands milk modified by this method has given me, in the majority of cases, good results. I wish to thank Prof. Kingsbury for the use of his private laboratory, as well as Mr. Hadley for his valuable assistance.

TYPHOID FEVER.

By LEO B. AUERBACH, M.D.,

(Late of Denver.)

Ward, Colorado.

There have been many cases of typhoid fever during the last year, not only in Denver, but in almost every town in the state. Even out on the plains, among the farmers, typhoid fever has been unusually frequent. Typhoid fever is a disease that is always with us. It is a disease that is here, and is here to stay.

Much may be done by proper sanitary measures to prevent typhoid fever, but, in all probability, instead of this fever, except in epidemic form, growing less, it will most certainly be on the increase. The population of the United States is rapidly increasing and we will, therefore, have greater pollution of our streams and water sources. The treatment of typhoid fever in the past, as at the present time, consists in doing nothing, as well as in doing everything; that is, there are some physicians who believe that typhoid fever, outside of careful nursing and proper diet, does not require treatment. There are others who drug their patients with almost everything that has been recommended or suggested. Recently a new remedy, known as Viskolein, has come into vogue. With some physicians this treatment is regarded as almost, if not quite, a specific in the treatment of typhoid. I have tried Viskolein recently in a few cases of typhoid, one in particular; the case from the very outset presented the usual characteristics and symptoms which leads a physician to believe that it was likely to be, not only a typical but a severe case of typhoid. The Viskolein treatment was carried out to the fullest extent; I must say that the course of the fever was mild and the patient made an excellent convalescence, without any of the bad sequela that usually accompany or most certainly follow severe cases of typhoid. I merely call attention to this case, and to the use of Viskolein, that the profession may know that there is such a remedy, and, if they see fit, give it a trial. I am not one of those who believe in proprietary medicines or take up every new treatment or remedy that comes along, and I merely refer to Viskolein in the treatment of typhoid as I would to the salicylate of soda in the treatment of rheumatism, or to mercury and iodide of potash in the treatment of syphilis. The only objection that I find to the treatment of typhoid by the Viskolein method, is that the physician must visit his patient several times a day and that if results are to be obtained the physician must conduct and direct the treatment himself and not trust it to the friends of the patient; possibly a trained nurse might be competent to carry out the treatment.

In a second case of typhoid fever my results were not so good, but I believe that the failure in this patient was due partly to the fact that I trusted the treatment to a sister of the sick woman, and, second, that I withdrew the Viskolein too soon. It is important to continue to give full doses of the medicine until the temperature is completely controlled and for several days thereafter.



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EDITORIAL DEPARTMENT.

The Passing Year. The year 1898 will soon be only a memory. The leaves have gone to grass, the birds have flown south for their health, and the mercury waneth to zero. As the ocean is made up of water-drops, even so time's infinity is nothing more than an aggregate of little, living, priceless, present minutes—all else is but remembrance or anticipation. We, the true ancients, standing at the pinnacle of the centuries, are apt to look back with a smile of amused derision upon the ideas and doings of our child-like forefathers. Yet, after all, our boasted progress has been mainly one of environments. Man as man remains much the same in all ages—the same foibles and follies, passions and prejudices, mingled fatuity and divine intuition. Neither should we boast too loudly of our modern accomplishments, for even the

next generation may regard them in many respects as crude and preposterous. The main thing is to do the work at hand to the best of our ability, making stepping stones of our mistakes and failures, regarding our vocation not as a mere confidence game, but as a great science and art. Our constant aim and endeavor should be, as mechanics say, to "do a first-class job," whether it is lancing a boil, or setting a leg, or fitting a pair of spectacles, or conducting a typhoid case. The work is to be done well, not for the sake of fame, which is the breath of fools, nor for that will-of-the-wisp named glory, but because the highest pleasure in life is the consciousness of work well done. Solomon, who, for all his foolishness, was a wise man, understood this truth well when he wrote: "To rejoice in his labor is not vain; it is the portion of man; it is the gift of God."

A New Operation for Stone in the Bladder. Recognizing the dangers of the vesical and rectal distention commonly employed in the ordinary suprapubic operation, Dr. J. H. Nichols (*Columbus Medical Journal*, October 18th) has modified the operation, so as to dispense with these procedures. The patient is prepared for the table as usual, and the bladder is washed out several times with potassium permanganate solution. The abdominal incision is then made, and a sterilized sound is passed into the bladder, carrying it well up into the wound. The anterior wall of the bladder is made tense by traction with the left thumb and finger, while the right hand passes a curved needle, threaded with catgut, in and out through the bladder wall. This serves as a guy during the operation and afterward as an anchor. A vertical incision is then made below the needle entrance, and while the assistant passes two fingers well up into the rectum, the surgeon palpates the vesical cavity and removes the stone with fingers or forceps. The bladder is not sutured, but anchored by the aforementioned catgut high up in the incision, the tension

on the wall causing coaptation of the edges of the wound, and the abdomen is closed in the usual manner. A urethral catheter is left in the bladder for a few hours, after which it is used as frequently as needed to prevent distention.

Neurasthenic Pulse. Erben (quoted in *Medical Review of Reviews*) has noted repeatedly that when neurasthenic patients are made to squat down or bend well forward, there occurs a most distinct slowing of the pulse, a phenomenon which never takes place under normal conditions. He also speaks of the tendency in such subjects to sudden pulse acceleration on rising or slight excitement. Both phenomena are attributed to irritable heart.

Intermittent Lameness. Bourgeois (quoted in *Gaillard's Medical Journal* for October) attributes this rare condition of intermitting painful paralysis to sudden arterial obliteration, due usually to atheroma, the result of lithemia, alcoholism, saturnism, malaria, diabetes, syphilis or senility. In other cases an aneurysm or a tumor may induce the symptoms by pressure on the vessel. The symptoms come on during walking and are usually entirely relieved by lying down to rest. During an attack the arterial pulsation in the affected member is diminished or even imperceptible. The skin of this limb is often colder than its fellow, presenting a blue or discolored appearance. In addition to the pain and paralysis, there is often at a later stage extreme numbness, with sensations of burning and itching, or intolerable cramp and marked contracture. In very many cases treatment is extremely satisfactory, the patient being completely relieved by the administration of sodium or potassium iodide, along with careful regulation of diet.

Cerebrospinal Rhinorrhea. The differentiation of this rare condition from other forms of nasal discharge were clearly set forth by St. Clair Thomson in the section of Laryngology and Otology

at the late annual Edinburgh meeting of the British Medical Association (*British Medical Journal*, Oct. 22). The flow, he says, is continuous, both day and night, and is limited entirely to one nostril, unless this is obstructed. It is not accompanied with lachrymation or conjunctival suffusion. When of arachnoid origin there is frequently headache or other mental symptoms, which are relieved by the discharge. The fluid itself is perfectly colorless and transparent, tasteless or slightly salty, faintly alkaline, non-viscid, with a specific gravity, between 1.005 and 1.010. It gives no precipitate on adding acetic acid, but does so with cold nitric acid, the precipitate disappearing on heating and reappearing on cooling. Saturation with magnesium sulphate, or sodium chloride, or ammonium sulphate, should also yield a precipitate. The liquid reacts pink or rose red to the biuret test (copper sulphate and excess of caustic potash) and reduces Fehling's solution, but does not ferment with yeast. On evaporating to dryness, an alcoholic extract of the fluid, needlelike crystals are obtained.

Cerebral Concussion. Albert G. Bouffleur (*Philadelphia Medical Journal*, Oct. 29th) thinks that this term should be limited to those phenomena resulting from traumatic disturbances of brain function without gross mechanical lesions. Slight concussion manifestations are due to disturbances of fluid equilibrium in the brain, and are always of momentary duration and effect. More severe concussion excites vasomotor spasm and a state of shock, which persists until the circulatory equilibrium is restored. The gross mechanical lesions of the brain produced by trauma, with or without fracture, are the same as of contusion elsewhere, modified only by the delicate structure and specialized function of the brain. "The term cerebral compression indicates a mechanical disturbance of the circulation of the brain by any lesion that materially increases intracranial tension."

The Relation of Urinary Quantity and Specific Gravity. Dr. Hugo Summa (*St. Louis Medical Gazette*, November) sums up the most

important deviations from the normal as follows:

1. If the amount and the specific gravity of urine increase or decrease simultaneously it is indicative of metabolic disturbances (for instance, a large amount of urine and high specific gravity in diabetes mellitus).

2. Increase in the amount of urine with a decrease of specific gravity beyond the normal proportion may indicate, if temporary, a temporary insufficiency of the kidneys; if permanent, chronic interstitial nephritis—one of the first and most reliable symptoms.

3. A decrease in the amount, without compensatory increase of specific gravity, usually indicates insufficient nutrition.

4. A clinically very important combination, diminished amount of urine, with diminished specific gravity and high color, in a feverish patient, permits the diagnosis of a complication of the feverish disease with granular atrophy of the kidneys.

Pruritus Vulvae. Herman (*British Medical Journal*) recommends etiologic treatment as follows for this symptom: White precipitate ointment for pediculi; absolute cleanliness, when due to dirt; warm hip baths, containing liquor carboni detergens, followed by a powder of boric acid, for the eczema of pregnancy and fat elderly woman; corrosive sublimate, 1-2,000, after squeezing out contents of follicles, in follicular pruritus; saturated solution of borax or boric acid or 1 to 7 solution of carbolic acid, antiseptic douches and sedative dusting powders, for irritating discharges or the pruritus of venous congestion.

Arsenic in Psoriasis. Malcolm Morris (*British Medical Journal*, Oct. 15th) writes, *inter alia*, of the good effects of this drug, particularly in young persons, who are apt to bear the local applica-

tion of chrysarabin badly. It is also most useful, he says, in adults when the process is very chronic and non-inflammatory in type. In such cases he is accustomed to use Fowler's solution, freely diluted, beginning with a dose of three to four minims, after meals, three times a day, increased by degrees up to ten minims. Arsenic is contraindicated in psoriasis when the eruption covers the whole or a large part of the cutaneous surface.

Angioneurotic Edema. The salient features of this peculiar vasomotor disorder are thus summarized by Charles Howard Lodor, in *Medicine* for November:

1. The strongly neurotic cast of the individual affected, and the similarity in the prodrome and onset of the attack to those in migraine.
2. The great tendency of local recurrence and the danger of edema in the upper air passages.
3. The character of the swelling itself—a circumscribed edema not confined to one tissue, but spread through contiguous structures, of brawny hardness and not translucent, of rapid, though not sudden, development.
4. The numbness or partial anesthesia remaining for a time after the disappearance of the swelling.

Pyocyanic Infection. The bacillus pyocyanus of green pus may give rise to either a local or a general infection, says Daniel N. Eisendrath, in November *Medicine*. The symptoms of general infection by this germ are headache, fever, chill, vomiting, greenish diarrhea and rapid pulse. In children there may be also slight fever, albuminuria, a purplish or bluish papular eruption and nervous symptoms, such as spastic paralysis. The writer reports a case of unmixed infection by this organism, producing an ovarian abscess, as proved by bacteriologic cultures after a celiotomy.

Cerebral Paralysis of Children. The editor of *Archives of Pediatrics* presents in the November number a concise summary of this subject. The three types of paralysis, according to period of development, are those occurring before, during, and after birth. Prenatal paralyses are due ordinarily either to porencephaly or to agensis corticallis, that is defective development of the cellular elements of the cortical or pyramidal cells, a condition which is found in neurotic family idiocy. Intracranial hemorrhage as a cause of prenatal paralysis is extremely rare. The type of palsy is usually diplegic or paraplegic.

Prolonged and tedious labor is the chief cause of birth paralysis, being a much more important factor than the proper use of instruments, abnormal presentations or premature birth. The reason for this fact is that partial asphyxia of the child in the maternal passage causes obstruction in the circulation of the brain, with consequent meningeal hemorrhage or plugging of vessels. The usual types from this cause are diplegia and paraplegia, the hemiplegic subjects, however, being more likely to survive for some years. Psychical symptoms vary from the slightest mental sluggishness to absolute idiocy. Contractions, convulsions and choreic movements are far more common than in prenatal palsies, since in these there is usually a lack of irritable nerve elements.

The acquired cerebral paralysis of young children is often very obscure as to origin. It occasionally occurs during the course of infectious diseases, particularly pertussis, and sometimes follows traumatism. The onset is frequently marked by convulsions and fever. The usual form of paralysis is hemiplegia, which is accompanied by contracture in three-fourths of all cases.

All three forms of infantile cerebral paralysis are distinguished by more or less progressive defective mental development. Owing to the cortical location of the lesions, coma and convulsions are more frequent

than in adults, the later motor disturbance often leading to epilepsy. Treatment is always unsatisfactory. The important thing, for the physician, is not to mistake any of these palsies for the muscular weakness of rickets or marasmus.

The Iodides in Chronic Parenchymatous Nephritis. After clinical observation during the past eighteen years of the benefits of small doses of iodides continued for months or even years, Professor Leonard Weber (*October Post-Graduate*) is convinced that these salts have "power to retard, modify and improve subacute and chronic inflammatory processes concerning the connective tissue of parenchymatous organs like the kidneys, the liver, the lungs, and particularly sclerotic diseases of the arterial vessels." This salutary effect he attributes to direct inhibition of connective tissue proliferation and subsequent disintegration and fatty metamorphosis of infiltrated corpuscular elements and the removal of the same. In cases with syphilitic history it is well to give larger doses (10-15 grains t.i.d.) for a time.

Western Surgical and Gynecological Association. The coming meeting of the Western Surgical and Gynecological Association at Omaha, December 28 and 29, promises, by the character of the preliminary program, to be one of the best yet held by this rapidly growing body of Western Surgeons and Gynecologists. The West possesses not only men of national reputation, but thousands of those who by their work, their papers and their discussions, show themselves to be in the vanguard of modern practice. The local committee desires to greet them all at the meeting. Every man specially interested is invited to become a member and urged to contribute to its program, take part in the discussions and thus increase the force of Western ideas and add the stamp of prestige to Western institutions and practice.

The mid-holiday season is a most convenient time to "hie awa" to medical society, and the time is not only most profitably, but most pleasantly spent, by those of a scientific spirit. And our busy fellows not only find it a rest, a respite and a regeneration, but the acquaintance of those who would otherwise remain strangers makes these meetings especially agreeable and valuable, yea, indeed, inspirational.

The profession of Omaha will give a banquet to their guests and make every effort to make pleasant and profitable their visit. The local committee at Omaha is: J. P. Lord, Chairman; J. E. Summers, Jr., A. F. Jonas, W. O. Henry, B. B. Davis, C. C. Allison, Ewing Brown, and H. P. Hamilton.

Early Diagnosis in Whooping-Cough. The diagnosis can be made at once by a bacteriologic examination of the nasal secretions for pertussis pol-bacteria, asserts Henry Lewis Wagner (*New York Medical Journal*, Oct. 8th). The method he employs consists first in staining with a weak alkaline solution of methylene blue. This stain is then decolorized by a freshly prepared 2 per cent. argonin solution, which leaves only the bacteria stained blue. To prevent reoxidation by atmospheric oxygen, the specimen should be washed off with a concentrated solution of cream of tartar. As a contrast stain we may use one part concentrated alcoholic solution of fuchsin to 40 parts of water. The specific bacterium, when full grown, is two or three times as long as broad, rounded and somewhat thickened at the ends, divided in the middle and nearly always encapsulated like the pneumococcus.

Acclimatization of White Men in the Tropics. A leading article in the *British Medical Journal* takes strong ground against the pessimism which has so long prevailed about this matter, and affirms that the real enemy to white men is not the

heat, but the microbe—hence not invincible. The writer appeals to facts as opposed to theories, and refers to the change in opinion regarding the West Indies, formerly called the white man's grave, but now ranked among the best sanatoria. The death-rate of European troops in the tropics, which used to be from 100 to 129 per 1,000, is now as low as 12 per 1,000 in India, and in Trinidad and Barbadoes is even less than at home. The acclimatized immigrants of the tropics are quite as well developed in mind and body as their forefathers in the mother countries. The Costa Ricans, the writer remarks, are handsome, stalwart men, as often fair-haired, red-cheeked and blue-eyed as their kinsfolk of Europe. The death-rate of Cuban Spaniards is less than in Spain, while their birth-rate is greater. "The Boers are the finest men in South Africa"—a candid admission certainly for an English periodical to make. The concluding paragraph of the article reads as follows: "It is hardly reasonable to dispute any longer the possibility of tropical acclimatization. Already, more than 10,000,000 white men and their descendants are settled within the tropics, laying the foundations of new and perhaps greater civilizations. The question has in fact been settled by the *solvitur ambulando* argument. What is now to be done is to study the means and conditions which may lead us to a complete victory over the tropical microbes, which are the real enemies to be conquered."

Congenital Dislocation of the Hip Joint. The origin of this luxation is attributed by Joseph Korwitz

(*Pacific Medical Journal*, Oct.),

following Ammon, to arrest of development of the various parts of the joint at an early period of the fetal life. The acetabulum remains disc-like or shallow, while the head of the femur is often abnormally large, and cannot therefore remain in the diminutive acetabulum. The condition is often associated with other deformities. The writer aptly compares the goose-gait of the bilateral deformity to the motion of a child on a bicycle which is too high for him to sit on, so that he must bear his whole weight on the pedals.

EDITORIAL ITEMS.

Gonorrhea in Women.—The most certain sign of chronic gonorrhea is chronic urethritis, associated with uterine and adnexal inflammation.

Medico-Psychological Association.—The American Medico-Psychological Association will hold its next annual meeting in the City of New York, May 23 to 26, 1899.

Langsdale's Lancet.—The *Lancet* is no longer Langsdale's, he having sold the journal to Dr. John Punton, of the University Medical College, of Kansas City.

Good for Gleet.—The local application of 25 per cent. ichthyol salve, by means of a fenestrated steel sound, is highly praised by A. Ravogli (*Chicago Clinic*, October) in inveterate cases of posterior urethritis, with infiltration of the submucous tissues.

Mosquitoes and Malaria.—Surgeon Major Ross, of the Indian Medical Service, has proven beyond question, by experiments with birds and mosquitoes, that the latter insects may act as hosts to the malarial parasites, and thus spread the disease by direct or indirect infection.

Dr. J. W. Collins, Sr.—The doctor announces to the medical profession of Denver his return and that he has resumed general practice, and also that he will give special attention to medical and electrical treatment of the diseases of women. His office is in the California Building.

Yellow Headaches.—Five grains of sodium sulphite, three or four times a day, will cure those cases of headache where the tongue is broad and pale and covered with a yellowish-white coat, says the *Medical Summary*. The sulphites are old and valuable remedies, which are too little used nowadays.

Cord Around the Neck.—Dr. Charles Baum, of the *Philadelphia Polyclinic*, asserts that when during the last weeks of pregnancy the movements of the fetus become markedly lessened or almost entirely cease, one may be pretty certain that the umbilical cord has become coiled one or more times around its neck.

Calculus of the Bladder in Boys.—The three symptoms which, taken together, are almost pathognomonic are exquisite pain on urination, referred to the end of the penis, and accompanied by bleeding, particularly toward the close of micturition, together with elongation of the prepuce, due to traction on account of the pain.

BOOKS.

Text Book of Medical and Pharmaceutical Chemistry. — By Elias H. Bartley, B.S., M.D., Ph.G., Professor of Chemistry and Toxicology in Long Island College Hospital; Dean and Professor of Organic Chemistry in the Brooklyn College of Pharmacy. Fifth Edition, Revised and Enlarged. Twelvemo, 738 pages, with 96 illustrations. Price, \$3.00. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street, 1898.

We have used this text book in our classes for the past six years and consider it the most practical, comprehensive and comprehensible work upon the subject for medical students. The five parts into which the contents are now divided deal especially with medical physics and theoretical, inorganic, organic and physiological and clinical chemistry, including uranalysis. There are numerous convenient tables of differential testing and comparative tables on diet, urine, milk, etc. While the primary aim of the author, to achieve the "golden mean," has been maintained, as in former editions, the present one has been very thoroughly revised and contains of necessity considerable new matter, though the price of the book remains as before. The typography is excellent, and errors in this regard are exceedingly few.

An Abridged Therapy.—Manual for the Biochemical Treatment of Disease. By Dr. Med. Schuessler, of Oldenburg. Twenty-fifth Edition, in Part Rewritten. Translated by Prof. Louis H. Tafel. Philadelphia: Boericke & Tafel, 1898. Price, \$1; by mail, \$1.07.

This little volume has at least one merit, namely, that there is not much of it. The so-called science of biochemistry, developed by the late Dr. Schuessler, purports to cure diseases with eleven inorganic remedies. These remedies are normal ingredients of the human body and are administered in homeopathic doses. Iron, for example, says the author, will cure the first stage of all inflammations, and common salt, internally, is a sovereign medicine for certain toothaches. "Silicea," that is, sand, "will prevent the formation of renal gravel." Puerperal fever is not to be treated by cleaning out the uterus and by stimulation, but by a "specific remedy," to-wit, kali phosphoricum. If one gets homesick, he should take potassium phosphate; if he has the lock-jaw, the phosphate of magnesium is "the stuff" that will bring him out, or if he has the gleet, a pinch of salt will dry him up. And thus it runs *ad captandum vulgus*.

Histology, Normal and Morbid.—By Edward K. Dunham, M.D., Professor of General Pathology, Bacteriology and Hygiene in the University and Bellevue Hospital Medical College, New York. In one very handsome octavo volume of 448 pages, with 363 illustrations. Cloth, \$3.25 net. Lea Brothers & Co., Publishers, Philadelphia and New York.

As the title indicates, this work is unique in teaching the allied subjects of normal and morbid histology in close comparison within the compass of a single volume. The method is certainly the most natural one, and in this author's hands is made the most of. In addition to a comprehensive introduction, the text consists of three parts, on normal and morbid histology and histological technique respectively. The last mentioned division furnishes condensed but complete directions for the preparation of specimens and the use of the microscope in their examination. The author is always clear, as well as concise. His descriptions are admirably seconded by the profuse series of well chosen engravings, which embellish nearly every page. As an elementary text book for students, the book fulfills every useful purpose.

A Pocket Medical Dictionary.—Giving the Pronunciation and Definition of the Principal Words Used in Medicine and the Collateral Sciences. By George M. Gould, A.M., M.D., Author of the "Illustrated Medical Dictionary," etc. A New Edition, Entirely Rewritten and Enlarged, including over 21,000 words. Price, \$1.00. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street, 1898.

Over 85,000 of Gould's dictionaries have been sold within a few years to English speaking medical students and practitioners, and as a lexicographer the author is considered a standard authority in Great Britain and Australia, as well as in this country. In addition to the concise definition and simple pronunciation of all common medical terms, the book includes complete tables of arteries, muscles, nerves, bacteria, bacilli, micrococci, spirilla and thermometric scales, an English metric dose list of drugs and their preparations, and an extensive supplementary table of clinical eponymic terms. The book is printed clearly on fine, thin paper; it has a flexible cover, and, despite its great store of concrete information, is truly a pocket volume.

The Physician's Visiting List for 1899.—Forty-eighth Year of its Publication. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street.

This favorite pocket volume is now printed in a regular, a perpetual and monthly edition. The regular edition is in five styles, for from 25 to 100 patients per day or week. The perpetual edition

is in two styles, for 1,300 and 2,600 names respectively. It is evident that with all these to choose from, every one may be suited. The book includes, as usual, in addition to the spaces for the visiting list, ruled blank leaves for cash accounts, addresses, memoranda, records of births and deaths, obstetric engagements, etc., with a calendar, dose table in English and metric, the treatment of asphyxia and apnea and other useful matter. It has a neat, close, leather cover and can be carried comfortably in the coat pocket.

A Manual of the Practice of Medicine.—By Frederick Taylor, M.D., F.R.C.P., Physician to and Lecturer on Medicine at Guy's Hospital; Consulting Physician to the Evelina Hospital for Sick Children; Examiner in Medicine at the University of London. Fifth Edition. Price, \$4.00. London: J. & A. Churchill, 7 Great Marlborough Street, 1898. P. Blakiston's Son & Co.

This solid and substantial book of a thousand pages was first issued in 1890, since which time it has passed through four revisions. The contents treat, in the order named, of infectious diseases and diseases of the nervous system, of the muscles, the organs of respiration, organs of circulation, organs of digestion, ductless glands, lymphatic system and blood, the urinary organs, chronic intoxications and effects of heat, diseases of bones and joints, and diseases of the skin. It will thus be seen that the field of general medicine is well covered. The author renders a concrete and practical account of every subject. The general remarks introducing each section are most excellent. His differential observations on the treatment of each morbid condition are particularly helpful and praiseworthy. The text is suitably illustrated with temperature charts, sphygmographic tracings, localization charts and other drawings. The type of the present edition is new and clear, and considerable use is made of italics by way of emphasis. As regards both clinical diagnosis and treatment, the book is entirely up to date.

A Text Book of Pathology.—By Alfred Stengel, M.D., Instructor in Clinical Medicine in the University of Pennsylvania; Professor of Clinical Medicine in the Woman's Medical College; Physician to the Philadelphia Hospital and to the Children's Hospital, Philadelphia, etc. With 372 illustrations; octavo, 848 pages. Price, in Cloth, \$4.00 net; half morocco, \$5.00 net. Philadelphia: W. B. Saunders, 925 Walnut St., 1898.

The author of this elegant volume is no stranger in the ranks of medical literature, being connected with Dr. Gould in the great Year Book, published by Mr. Saunders. The work he now brings before the profession is pre-eminently a treatise on clinical pathology, treating the multiform causes and nature of diseases from the

standpoint of practical utility. One-third of the text is devoted to general pathology, and the remainder to special pathology. The various sections are admirably balanced; no subject is neglected and none overdone. As was to be expected, pathologic anatomy, notably that of the nervous system, and bacteriology are amplified and revised according to the very latest researches. The great array of photographic illustrations, microscopic and macroscopic, colored or black and white, provide a select and unsurpassed atlas of pathology for reference and comparison. The work is destined to be a factor in the further progress of scientific medicine.

International Clinics.—A Quarterly of Clinical Lectures on Medicine, Neurology, Surgery, Gynecology, Obstetrics, Ophthalmology, Laryngology, Pharyngology, Rhinology, Otology and Dermatology, and Specially Prepared Articles on Treatment and Drugs. By Professors and Lecturers in the Leading Medical Colleges of the United States, Germany, Austria, France, Great Britain and Canada. Edited by Judson Daland, M.D., Philadelphia; J. Mitchell Bruce, M.D., F.R.C.P., London, England; and David W. Finlay, M.D., F.R.C.P., Aberdeen, Scotland. Volume III.; Eighth Series; 1898. Philadelphia: J. B. Lippincott Company.

The latest number of this valuable publication is unusually rich in high class articles on treatment, including, among others: "The Treatment of Tuberculosis of the Ankle Joints," by Von Bramann; "The Diagnosis and Treatment of Ocular Headache," by Casey A. Wood; a second lecture on the "Treatment of Tuberculosis," by Professor Grancher; "The Principles Underlying the Treatment of Derangements of Cardiac Function," by Eshner; "The Treatment of Acute Bronchitis," by John A. Robinson; "Practical Observations on the Treatment of Anteversion and Anteflexion," by J. C. Webster; and "The Treatment of the Infant at the Breast," by Sansom. The other departments of the volume are equally well represented.



SELECTIONS.

Treatment of Sleeplessness.—Dr. Elmore S. Pettijohn, of Alma, Mich., read an interesting article on this subject at the late meeting of the Michigan State Medical Society (*Medical Review*, Oct. 22d). In speaking of the drug treatment for insomnia, he states that he has found the use of Trional most effectual when the patient is unable to sleep soon after retiring. Ten to fifteen grains are administered in a glass of hot milk and repeated in half an hour, on the belief and from the experience of three years, that the effects begin within an hour after administration. If the patient is able to fall asleep, but awakens frequently, or after a few hours' rest, and finds it difficult to sleep, Sulfonal, ten to twenty grains, is administered in the same manner at 5 o'clock in the afternoon and again at bedtime. Its effects last often during the next day and night and it should be given only on alternate days. A simple aqueous solution of sodium or lithium bromide, ten to fifteen grains, given three times, half an hour apart, before retiring, inhibits functional energy of the protoplasmic constituents of the nerve centers, the blood vessels contract from a lessened blood supply and sleep follows. In cases of muscular agitation, the fluid extract of Conium, added to the bromide, aids in reducing the cerebral excitement.

The Practical Treatment of Scalds and Burns.—N. David Chapman, B.S., M.D., of Syracuse, N. Y., after detailing four cases of more or less severe burns, in which he derived great help from the use of Unguentine, which was alternated and compared with the usual oily applications, reached the following conclusions regarding this valuable preparation: A—Easy to apply. B—Great relief to patient, it acting as a sedative, cooling and non-irritating. C—It does not dry out so quickly, and consequently the dressings do not have to be changed so often. D—Rapid cicatrizing. E—When used prevents granulation tissues. F—It is non-toxic. G—Patients recover more quickly under the Unguentine treatment than any other. H—Prevents the necessity of skin grafting in a good many cases by hastening the reparative processes. I—It is much more convenient, neat and practicable.—Abstract from Article in *New York Medical Journal*.

In Laryngeal or Winter Coughs.—Dr. Walter M. Fleming (*Journal of Nervous and Mental Disease*) says that in acute attacks of laryngeal or winter cough, tickling and irritability of larynx, Antikamnia

and Codeine Tablets are exceedingly trustworthy. If the irritation or spasm prevails at night, the patient should take a 5-grain tablet, containing $4\frac{3}{4}$ -gr. Antikamnia and $\frac{1}{4}$ -gr. Sulphate Codeine, an hour before retiring and repeat it hourly until the irritation is allayed. Allow the tablet to dissolve slowly in the mouth, swallowing the saliva. After taking the second or third tablet, the cough is usually under control, at least for that paroxysm and for the night. Should the irritation prevail in the morning or at midday, the same course of administration should be observed until subdued. In neuralgia, in short, for the multitude of nervous ailments, he doubts if there is another remedial agent so reliable, serviceable and satisfactory, and this, without establishing an exaction, requirement or habit in the system, as morphine does.—*New York Medical Journal*.

The Only One.—"I am glad to be able to give you the following testimony regarding a patient who had been an invalid for many years, and has had great trouble with her diet, I think due to a sub-acute inflammation of the mucous membrane of the stomach and bowels. For months at a time she has been unable to take a particle of starchy food, and naturally a number of the prepared foods have been tried and different ones have seemed for a time to agree with her, but Imperial Granum is the only one she can always rely on, often using it exclusively as a diet for weeks at a time. In one or two instances we feel that it has almost saved her life."

We call the attention of our readers to the advertisement of the Robinson-Pettet Co., Louisville, Ky., which will be found on another page of this issue. This house was established fifty years ago, and enjoys a widespread reputation as manufacturers of high character. We do not hesitate to endorse their preparations as being all that they claim for them.

"For nearly two years I have been using Ahtiphlogistine in a large variety of inflammatory affections with the most satisfactory results. Particularly in pneumonia and diseased conditions where the old flaxseed poultices have formerly been used. I consider it a very valuable remedy and conscientiously and cheerfully recommend it to physicians generally."—A. D. Yorke, M.D., Brockton, Mass.

J. H. Goethe, M.D., Varnville, S. C., says: "Celerina was given to a patient suffering from nervous prostration, the result of habitual alcoholic excess. Under its administration his system was not only completely renovated, but he was enabled to overcome the habit of indulging in strong drink, and is now enjoying good health. I regard Celerina of great value to the profession."

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Syphilitic Headache.—Headache is often the sequelae of syphilis and for this headache we have the Elixir Six Iodides, a remedy which is entitled to be placed in the list of specifics. It is always advisable in the treatment of continuous, persistent headache to enquire as to the possibility of a syphilitic taint, which may be inherited, or may have been contracted by indiscretion. We can frequently trace the specific poison to people that have innocently contracted it. Elixir Six Iodides never fails to effect a cure in this ailment.—*The Army and Naval Magazine.*

The following letter, from Mavrogeny Pacha, Physician-in-Chief to His Majesty the Sultan, is but one of many to show the esteem in which distinguished physicians hold the well known tonic wine, Vin Mariani:

“CONSTANTINOPLE, Yildiz Palace, July 2, 1895:

“Sworn enemy of the proprietary medicines which have of late years inundated all countries, and whose only object is the acquisition of gain for the proprietors, without the least benefit to science nor to humanity, I make a single exception in favor of one preparation as meritorious, and which is thoroughly praiseworthy. I refer to Vin Mariani, which, without guise of deceit and mysticism, is valuable in its fortifying qualities, and has conferred high benefits upon weak and suffering humanity.

“MAVROGENY PACHA,

“Physician-in-Chief to His Majesty the Sultan.”

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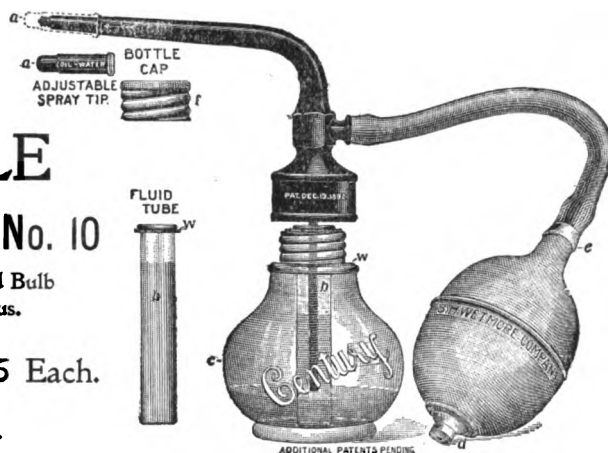
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Fig. XVII—Dorsal Position.

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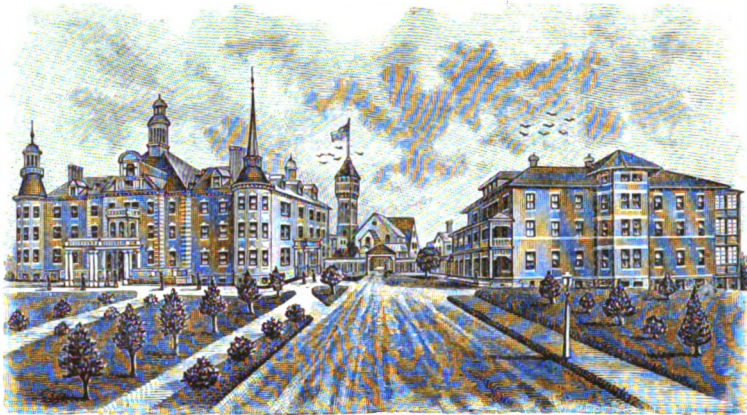
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DENVER MEDICAL TIMES

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JANUARY, 1899.

NUMBER 7.

ORIGINAL COMMUNICATIONS.

INTERDEPENDENT IDEATION IN DOGS AND CATS.

By JAMES WEIR, JR., M.D.,

Owensboro, Kentucky.

Creationists, or those who believe in the Mosaic account of the genesis of the world and the inhabitants thereof, especially those who deny individualism to any of the lower animals, hold that all ideation in such creatures is purely instinctive, that they never reason from cause to effect; in fact, that thought in all animals save man is non-correlative and the offspring of immediate and spontaneous germination.

This is an error which, in the main, is attributable to faulty education. For, as soon as one grasps the idea that man is but the last link in a chain which leads back to the very beginning of life, he begins to perceive that ideation in the lower animals is the same in kind (though differing in degree) as it is in human beings.

Man has so long boasted to himself that he holds a unique niche in the scheme of animal life that he is loth to abandon the idea and to confess that this position is purely an imaginary one. Even Romanes, acute and far-sighted as he was, when he entered on the study of the psychology of the lower animals, had no idea of yielding the possession of abstraction to any animal save man; and yet, before he had finished gathering the data for his great work, "Mental Evolution in Animals," he was compelled to admit that many of the lower animals gave unmistakable evidences of being able to formulate concepts which required abstract thought! Of course, the mental abstraction that was evinced by such creatures was far below that of the most psychically immature of the very lowest of mankind, yet it was present in a certain degree and could not be ignored. I do not intend, however, in this paper, to institute a comparison between the finer shades of psychical acuteness as observed in man and

in the lower animals; I simply wish to introduce certain evidence which will show, I believe, that some of the lower animals do reason from cause to effect; that their thoughts, on occasions, are interdependent and correlative.

The fable of the crow, the cheese and the fox has always been my favorite, and its "*haec fabula docet*" is to me the most pointed of all the fables of Aesop. The ruse of the fox, whereby he gains the coveted bit of cheese, seems to me to be the very acme of strategical cunning. Not long ago I saw this fable enacted to a certain extent by two dogs, Dick and Bounce.

These animals, English fox-terriers, belong to one of my friends, and are noted for their intelligence and beauty. They are allowed the freedom of the house, and pass most of their time in the library. One particular spot near the fireplace is greatly coveted and formerly caused much strife between the dogs. Repeated whippings by the master finally abolished this, however, and now this desirable lounging-place belongs to the dog which, for the time being, occupies it.

One day during early spring, when the weather was quite cold, Dick was the fortunate possessor of this warm and cosy corner by the fireside, much to the disgust of Bounce. The latter wandered about whining and ill at ease. Suddenly he left the room and ran into the hall, where he set up a loud and angry barking. Dick sprang to his feet and rushed out to see what in the world was the matter. Quick as a flash Bounce darted past him, and before Dick knew what had happened the shrewd little schemer was snugly coiled up on the coveted rug!

In this instance, interdependent ideation is to be observed beyond question of doubt. The dog, Bounce, was evidently very desirous of occupying the corner by the fireside; he knew that if he attacked Dick and attempted to drive him away his master would give him a beating; he therefore evolved the stratagem which he afterward perpetrated with such perfect success. In the evolution of this ruse, one idea correlated with another until the concept as a whole embraced several ideas, each of them distinct yet interdependent. This stratagem was not instinctive, neither was it immediate and spontaneous; it required some ratiocinative ability as well as a noticeable interval of time for its evolution. Furthermore, the owner of these dogs informs me that Bounce has used this ruse twice since the time of the first observation!

The road in front of my house passes through a cut some six or seven feet deep. This cut, on my side of the road, is bounded by a brick wall. The head of a traveler walking along the roadway will not reach the top of the wall by several inches. Noting

this, one of my dogs has elaborated a dangerous pastime or amusement which will, I greatly fear, eventually lead to his death unless he abandons it. Whenever he sees anyone walking along the road he will crouch down on the lawn immediately behind the coping of the wall, and waiting until the unsuspecting passer-by has arrived just opposite his lurking place, he will suddenly spring up and let out a loud and ferocious bark. The astounded and greatly terrified traveler generally finds himself in the middle of the road before he realizes what has happened to him. In the meantime the dog has made his way toward the house; he knows that he has broken the peace, therefore he puts as great a distance between his victim and himself as he possibly can!

Notwithstanding the fact that I have punished him time and again, I cannot make him give up this unseemly, discourteous and utterly uncalled-for breach of the peace. He has the kindest disposition I have ever met with in a dog, and cannot be made to attack anyone, yet he seems to have become completely infatuated with the joke of his feigned assaults on inoffensive passers-by. What induced him to begin this practice I cannot conceive; I fear, however, that someone will fail to appreciate his little joke some day, and will introduce him to the canine heaven via the revolver or the poison route.

These assaults are, unmistakably, feigned attacks, consequently cannot be instinctive; such an instinct is not present in the psychical organism of the dog. Of course, the feigned attacks of a dog when at play with one of his kind are wholly and entirely instinctive; the feigned assaults described above, however, are engendered by psychical operations whose inciting and exciting stimuli are, by no manner of means, instinctive. All dogs are more or less playful at times; their fun is, however, always open and easily to be appreciated. In the case of the practical joker now under discussion, however, the fun is an unknown quantity save in the mind of the joker himself.

This dog may have accidentally discovered the effect of a sudden growl or bark on some timid or unwary traveler; yet this does not destroy the fact that he was sufficiently acute to store up the experiment in his mind and use it again on future occasions. His method of procedure clearly shows correlative ideation in rather a high degree.

The late Lieutenant Conway, U. S. N., once owned a half-breed Portugese bloodhound, which, on many occasions, gave evidences of high intelligence. This animal was with Conway on the Huron when that vessel was wrecked, and, like his master on that occasion, saved his life by swimming ashore. In fact,

Lieutenant Conway told me that he followed the dog (which made a bee-line for the nearest point of land) when he swam to the beach.

The officers of the Huron were in the habit of playing a kind of hand-ball, in which six tennis balls were used. On one occasion the lad who had been sent for the balls brought only five of them to the deck. "Jim," Conway's dog, who (he was worthy of the pronoun) always seemed to watch the sport with a great deal of interest, at once noticed that one of the balls was absent; he whined and nudged the boy with his nose in his endeavors to call the latter's attention to this fact. Finally, when he perceived that he was not understood, he went to the place where the balls were kept, picked up the sixth ball in his mouth, brought it to the spot where the other five were lying on the deck, and there dropped it. This dog was tested on several occasions and never failed to show that he possessed the faculty of computing, that is, as far as the balls were concerned. This is a degree of mental abstraction which surpasses that of some savages who cannot count above five.

The court house of this county is situated in the central square of the county seat; this square is surrounded by an iron fence in which there are four gates, one at each of the cardinal points, and these gates open outwardly. There are dozens of large forest trees in this square, which is covered by a thick and well-set carpet of bluegrass. This is a favorite lounging place for dogs, several of which can be seen here at all hours of the day.

Conway's "Jim" soon discovered the way in which the gates opened, and whenever he wished to enter the square did not climb over the fence like a common, ignorant cur, but reared up on his hind legs, crooked one of his paws over the top bar of the gate, and pulled it toward himself. When it had opened wide enough for his purpose, he slipped through and went in. When he wished to go out, he ran to the gate and gave it a push with his paws, which caused it to swing open; he then passed through. Here was true correlative ideation; a reasoning from cause to effect that was not in the slightest degree instinctive.

My cat, Melchizedek, is very fond of indulging in mimic battles with my feet, in which he growls and uses his claws and teeth, sometimes with such effective naturalness that they pierce the thin leather of my shoes and inflict slight wounds. Every evening he will accompany me for a stroll among my flowers and will insist on having a battle. When I substitute my hands for my feet, he at once recognizes the fact, and notwithstanding his growls are as loud and as fierce as ever, his teeth and claws

never break the skin! His psychical and physical co-ordination is immediate and, seemingly, as perfect as would be that of a man under like circumstances.

When this cat was quite young he began to give evidences of high intelligence. He soon learned to know the tea bell, and is the first at the table. Sometimes when he is very hungry and is not served at once, he makes known his wants by cries which gradually grow so loud that they become annoying. On such occasions a servant will remove him to the back porch. Melchizedek is not at all disturbed by this, however, but will go up the back stairs, then through the upper hall, and then down the front stairway into the lower hall, from which he will enter the breakfast room or the dining salon through doors which always remain open. He will make this journey whenever he is banished; finally, some one will take pity on him and will feed him. He learned to do this early in life, and evolved the plan himself without instruction from anyone. Now, in this instance clearly there is interdependent thought; on the occasion when he was first banished from the breakfast room, this cat remembered that there was "another road leading to Rome;" he followed that road and arrived at his goal. Could man do more or reason better?

A CONSIDERATION OF THE LIMIT TO OPERATIVE GYNECOLOGY.

By **SHELBY C. CARSON, M.D., A.M.,**

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"Ignorance is the curse of God,—
Knowledge, the wing wherewith we fly to heaven."

While each separate branch of medicine has its beauties and its advantages, and therefore its admirers and advocates, the science of gynecology ranks second to none in all its broad domain. Surely, if we are swayed at all by sentiment, it has priority over its cognate departments in that it either alleviates or eradicates those ills that affect that tender portion of the human race from which we imbibe our highest inspirations to manliness and chivalry. Therefore "whoever ministers at its altars with honest purposes, or labors upon its edifice, or clears its foundations, strengthens its pillars, adorns its entablatures,

or contributes to raise its august dome still higher towards the skies commite himself in name and fame and character, with that which is and must be as durable as the frame of society."

The science of surgery is practically without limit. Possibly the next decade may open up another avenue to progress equal in importance to that period which has evolved an almost perfected asepsis and antisepsis. On the other hand, the art of surgery, the manipulative skill, the operative faculty has probably reached its summit. While physical diagnosis is designated by the lamented Page as the "mathematics" of medicine, surgery, above all other branches, is based upon principles and hedged in by fixed laws. It is often quoted that principles never change, that they remain as permanent as the everlasting hills. Such should be the case with those in regard to surgery. What are some of the recognized laws of surgery? First, never amputate or extirpate any portion of the human organism that does not endanger life, or disfigure, or produce invalidism. Second, never operate unless confronted by an actual necessity. Third, when in doubt, wait. Unless these restrictions are observed there is no true surgery. As Carlyle facetiously remarks, "You may paint with a very big brush and yet not be a great painter." How often does it occur that the effectual operation of these principles is held in abeyance by the erroneous, not to say erratic, ideas emanating from misguided minds?

The facile pen of Alexander Dumas in his "Celebrated Crimes" has rescued from the Dark Ages the motto of a wise surgeon, Guy de Chauliac, "In dangers, cautious. Be bold when sure. Friendly with fellow-workers. Not greedy of gain. Constant in duty." Only a short time since, one of the foremost surgeons of this age, and by the way, one of nature's noblemen as well—John A. Wyeth of New York—impressed the fact upon a large number of attentive medical men that surgery did not carry with it the idea "to lop off," but rather "to build up." At the late meeting of the British Medical Association, Thomas Annandale, of Edinburg, delivered the address upon surgery, during which he made the following assertion: "As opposed to the surgery of even a decade ago, the effect and aim now is to leave as much as possible to nature. It has taken a long time for surgeons to appreciate this step, but now that they have learned their role, the results have fully warranted their position." He thought that the lamentable moral aspect of the surgery of to-day could be traced to three factors, "(1) Active competition. (2) Untrained specialism. (3) Society demands."

There is a general disposition for everything to become surgical. Dr. Sinclair, before the Section of Obsterics at Montreal

last year, deploras the fact that "midwifery has become largely surgical—too surgical." That surgical interference in midwifery practice is a large factor towards surgical gynecology. If this be the correct idea of surgery, then surely the interrogation implied by this subject is a grave one, though, fortunately for woman-kind and the propagation of the species, the last seven or eight years has done much towards mitigating its gravity by re-inthroning, to a great degree, reason and common sense. As evidence of this, the pages of medical literature are now burdened with the voluminous, yet misleading, statistics of Spencer Wells, Keith, and Lawson Tait, as they hurried forward, seemingly with no other object in professional life than to reach and publish their two hundredth case of ovariectomy. There is now a surcease to their acrimonious discussion as to the length of the incision, the manner of treating the pedicle, or the value of the carbolic spray. Their rise, their sudden flash across the skies, their decadence, while perhaps a necessary link in the chain of progress, irresistably brings to mind—in spite of the dignity of the subject and this occasion—that distinctly Southern provincialism:

"You see that rooster on the fence,
Just hear him crow!
His satisfaction is immense,
His self-possession is intense,
His lusty lungs give evidence
That this is so.

"Another rooster sees him there
And hears him crow.
With flapping wings he cleaves the air—
The fence top is too small to share,
And so they fight and scratch and tear,
And down they go."

Are we yet entirely free from the "crowing" gynecologist?

A few months ago Dr. McBurney was asked what did he consider the limit to operative gynecology. With tears in his eyes, figuratively speaking, he laconically replied, "The woman's neck." Playfair is very broad in his views on this subject, saying: "Gynecology is as much surgical as medical practice, probably a great deal more so; and the modern gynecologist who may not handle the knife is very much like the modern soldier who is prohibited from using gunpowder." True, but as the use of gunpowder by the soldier usually brings about disaster and death, so the unwise employment of the knife is followed by the same dire consequences. Again, as the most brilliant victories, the greatest military achievements are accomplished without firing a gun, so the true foundation work of gynecology goes silently on without the bloody incision.

As the notorious Duke of Alva tersely expresses it, "It is the duty of a soldier to fight, of a general to conquer. If the victory be bloodless so much the better."

All recognize the truth of Diffenbach's assertion that "operative surgery is, of all branches of the healing art, the most suited to arouse enthusiasm in its followers; it is the bloody fight with disease for life." So Tillman, as if to curb this rash spirit of enthusiasm, in a true spirit of conservatism writes, "a difficult problem which often confronts the surgeon is to correctly weigh the indications and counter indications for undertaking an operation. It is often a hard question to decide whether a cure is not possible without an operation, and it is well to consider whether the proposed operation does not carry with it greater danger than the disease itself, especially in those cases where the annoyances are slight."

In the latter category fall so many of the ailments in gynecology. In fact, were the true and the false ideas as to the treatment of the various diseases of women sharply contrasted and carefully considered it is more than probable that the average gynecologist would meet with cases demanding capital operations about as often proportionately as the obstetrician would meet with placenta praevia or post partum hemorrhage. It is readily admitted that in hospitals, infirmaries and other institutions fitted specially for this class of work, in populous districts, much more material will present itself than to the ordinary practitioner. It is a fact beyond dispute, however, that where clinical material of a certain character is in demand the specialist is more tempted to advance a case from a minor to a graver class than he is to descend the scale. Many scholarly men express the opinion that Goodell's introduction to Keating & Coe is the crowning work of a master mind. And wherein consists its chief virtue? First, in its candid review of the inadequacy and utter failure of surgical interference in many cases, and second, the prominence given to the nerve element in woman—a state that naturally falls under medical gynecology. Each day, so far from detracting, but adds weight to the wisdom of the author. Special attention is now being largely directed to this subject by scientists. Doubtless the gentleman from Cleveland, Ohio, will elucidate this rather occult, though eminently important, consideration in his paper upon "The Relation of the Gynecologist and Neurologist."

In the Memphis Lancet for September is a highly interesting and instructive article on this point, where "the anatomy of the connection of the reproductive organs with the nervous system" is given in detail and impressed by an illustration. Ac-

cording to this, "there exists an intimate anatomical relation between the genitalia and the nervous system. The female genitals are supplied by both spinal and sympathetic nerves. The internal genitals—uterus, ovaries and tubes—are supplied by the sympathetic alone, while the external genitals are supplied by both systems. These two systems have intimate inosculations with one another." This same article very properly states the conclusion. "The gynecologist, with the rush that has been characteristic of this branch of surgery, has in the past, and even up to the present, practiced mutilating operations on women without due consideration of their cause and effect; he, too, has been biased in his opinions, looking oftener to the perfection of his surgical cases and the statistics of operations rather than to the good resulting, or to the serious constitutional conditions that may remain as the aftermath."

One of the marvels of the age is to see men working side by side every day in the same department, and with the same object in view, and yet entertaining such radically different theories. One will pursue a line of strict conservatism, while the other will mark for destruction every uterus and ovary that presents the merest show for an excuse. That some of these operations are totally unnecessary there is not the shadow of a doubt; that there is an indefinite mortality as a result is equally sure. A physician of prominence in New York is authority for the statement that when the operation for vaginal hysterectomy was in its infancy there were, to his own knowledge, six deaths therefrom within a week and not one of them reported. Goodell says that this boldness of execution without consideration "is the great medical error of the nineteenth century," and Professor Parvin—perhaps with more zeal than charity—after referring to the seductive glamour that attaches to successful surgery, as well as the fame and glitter of gold, intimates that "operations are performed that might have been averted by judicious hygiene, and patient, wise treatment." When members of the profession fully comprehend that an acute inflammation within the pelvis or abdomen almost debars an operation, and that a chronic inflammation rarely tends to the destruction of life; that even in the very low rate of mortality after operations there is still a preponderance in favor of non-interference, they will realize the futility of all efforts to establish such operations upon the basis of necessity. It simply narrows itself down to a question of expediency or relief from pain and discomfort; a question that is decided, if left to the patient, by her fortitude under suffering on one hand, or her recklessness on the other; or if left to the physician, is settled according to his scruples of conscience, and not

in accordance with the laws of surgery. "Undoubtedly we must consider the seriousness of the heretofore widespread practice of ablation of the ovaries."

The abrupt production of the menopause oftentimes brings untold misery upon the woman for years afterward—pains and aches to which her previous condition was an elysium. The world-wide recognized ability, skill and precision of judgment of Dr. Pryor, of New York, would give weight to any expression from his pen on this subject; but especially will it—for manifest reasons—bear heavily as an argument on the conservative side of the question. He says: "We are approaching the position in this work which calls for a halt and review of what we have formerly done. There can be no question that it is much more satisfactory to the surgeon to make a clean, radical operation of any case of pus in the pelvis which he meets. But, viewed from the standpoint of the woman that sudden or artificial menopause is about as distressing as the pus tubes. This is especially true where young women, who have never had children, are spayed."

Composing a large class of cases occurring in the practice of every gynecologist, and standing out prominently as the chief feature to be overcome, is that complex nervous condition having such various and distressing phenomena, and at the same time so slowly amenable to treatment. They have only to be mentioned to be appreciated as falling distinctly within medical lines. They present themselves in such protean forms and enter so largely into actual practice, that the specialty of the neurologist is in greater demand than that of the surgeon. These cases sometimes sink into confirmed neurasthenia. The neurasthenic appeals so strongly to one's sympathies and best efforts towards relief. Especially is this the case when one has in his memory a young woman of magnificent physique, the picture of health, overflowing with life and animation—soon after marriage having at her catamenial period a slight nervous attack, a gradual increase in frequency and intensity, then well marked hysteria, followed finally by consulting a gynecologist—as a consequence, a removal of both ovaries, a continued loss of flesh, of will power, a morbid despondency much aggravated by a desire for offspring—at last only snatched from the horrors of imbecility by Weir Mitchell's admirable treatment four years after the operation.

The celebrated Brown-Sequard promulgated a principle of physiology that would impress the utter folly of such an operation under such circumstances—where the organ gave no physical evidence of degenerative changes—"That every gland, whether or not provided with excretory ducts, gives to the blood a certain useful principle the absence of which is felt and made apparent

after its extirpation. The various troubles and functional derangements which are constant, although variable in degree, in women who have had the menopause anticipated by castration, form one of the strongest arguments in support of the glandular theory." For instance, in a careful observation made upon one hundred cases operated upon in Paris, it was found when women had prematurely lost both ovaries, 78 per cent. subsequently suffered a notable loss of memory, 60 per cent. were troubled with flashes of heat and vertigo, 50 per cent. confessed to a change in their character, such as irritable, irresponsible fits of temper, 42 per cent. suffered more or less from mental depression, and 10 per cent. were so depressed as to verge upon melancholia." On the other hand, the patient gynecologist, who fits himself for emergencies, and at the same time renders himself deaf to the seductive songs of the siren—who, with calm deliberation and unbiased judgment, gives his patient the benefit of his medical skill, and that powerful ally, Nature, often has reason to congratulate himself upon having steered clear of such distressing pitfalls. With such a practitioner, Skene's invaluable work, "Medical Gynecology," and Schaeffer's "Essentials of Gynecology," lie on top of the many grand volumes devoted to the endless surgical procedures now so vividly portrayed both by highly-wrought word pictures and colored plates. Such a man, when his patient suffers through the nervous system, whether from over-work or worry, or sexual irritation, discards, as far as practical, all drugs and nostrums, relying upon the enforcement of perfect hygienic and dietetic rules, looking well to regular functional activity, with absolute rest of body and mind, together with the judicious employment of massage, electricity and hydrotherapy—especially the system of baths as recommended by Dr. Baruch, of New York. When he meets with the various displacements—as is frequent—he recognizes the radical change which has taken place in the last few years as to a normal position, and that the ideas of treatment have, as a consequence, undergone a radical change—"Both ante flexion and ante version being now stricken from the list of pathological conditions." So many virgins bear their uteri anteriorly without the slightest detriment that these positions are now considered, if not entirely physiological, as at least consonant with perfect comfort and health. The retro-displacements, however, carry more gravity with them, more especially if there be adhesions. When there is no imprisonment of the organ, a systematic reposition with a blunt sound, the constant use of either glycerine or ichthyol tampons, and in some instances a well fitting pessary, will usually relieve the patient. Of course if the mal-position is the result of endometritis, subin-

volution, or fibroids, the proper treatment for these conditions should be instituted. Of the various operations for a simple backward displacement, Alexander's is more in the line with nature—far more so than ventro-fixation. Its simplicity recommends it, but frequently it is very tedious. To see Munde himself bending for fifteen or twenty minutes over the table with forceps in hand, diligently exploring a little incision for the round ligament, will impress one forcibly with the drawbacks to this procedure. Dr. Goffe's method of dissecting up the bladder, delivering the uterus into the anterior vagina, and suturing the round ligaments to the fundus—while a little more serious and requiring more skill—has the double advantage of being adapted to cases with and without adhesions. Dr. Pryor has an admirable, and yet simple, method also. He goes through the posterior cul de sac, breaks up the adhesions, tilts the uterus forward, holds it there by a tight gauze tampon in front of the cervix, packs the pelvis also with gauze—a pelvic Mickulicz, as he terms it—in order to provoke an exudate from the peritoneum with which to hold the organ in its new position. So soon as the incision is made and the uterus replaced, the woman is thrown into the Trendelenburg position. To one who has never had the opportunity of seeing the ovaries, tubes, and even the appendix, as they lie in their normal condition, through the vagina, this is a veritable revelation.

The gynecologist frequently meets with disorders of function "which are expressions of many conditions, both general and local"—amenorrhoea, menorrhagia, dysmenorrhoea, chlorosis and sterility, also rectal and vesical tenesmus, as well as the acute inflammatory conditions, ovaritis, pelvic peritonitis, and salpingitis. It would be ridiculous to advocate surgery in all this broad field. It is true that dysmenorrhoea and sterility are often cured by curettage or incision, but this is such a common recourse now that it is scarcely termed an operation. The vexing pains so common to most of these conditions, yield readily to anti-pyrine, gr. v., and salicylate of soda, gr. x., repeated two or three times a day, and especially at bedtime. But the therapeutic measure most often prescribed, and the least understood, is the application of hot water—a valuable adjunct when administered properly—a useless one, unfortunately, most often. As employed now, its fallacy rests upon, first, the want of heat, and second, upon "an anatomical error." Its temperature should be from 120 to 130. Some years ago the sudden appearance of a retained placenta in the chamber after an enema of hot water for the purpose of cleaning out an overloaded bowel, suggested to the writer the ready relaxing effect upon the pelvic organs of hot water in

the rectum. When we recall the anatomy of the generative organs, in connection with the rectum, it is clearly apparent that when the "ampulla" of the rectum is filled with water, the organs mentioned project into it just as if they were immersed in a basin of water. Indeed, can you not map out these organs with much greater facility and accuracy through the rectum? These enemata are best taken of a morning, and retained half an hour. "By this treatment the infiltration of the cul de sac disappears, the peristaltic movements of the intestines break down the adhesions, the exudates and purulent collections are absorbed, the vaginal cul de sac becomes supple, the uterus moveable and the region in question resumes almost its normal condition, especially after the judicious employment of massage." Notwithstanding some noted foreigners are beginning to abandon the vaginal route to pus tubes and pus cavities, Dr. Joseph Tabor Johnson's reasoning on that point is unanswerable. Fibroids, comparatively a harmless affection, should have the benefit of Shober's experience, or William E. Moseley's plan, of using from six to eight grains of the dessicated powder of thyroid gland each day, and Apostoli's electricity—unless multiple and pressing constantly upon the pelvic nerve—then hysterectomy is the only resort. In cancer, or in ectopic gestation, an early radical operation is true conservatism. A gynecologist modeled somewhat on these lines is the good Samaritan, in that he stimulates "investigation along the line of greater conservatism of the genital health of woman." This may be aided (1) by a deeper study of the problems of cell nutrition and general metabolism, in order to determine the relative value of glandular and other structures, and the relation of the pelvic organs to the great systemic laws. (2) By seeking the habits of regimen of individual patients as to diet, dress, social and educational life for the causes of disease, remembering that these, if allowed to go uncorrected, may handicap the best efforts of medical science. (3) By giving to every definitely diseased structure the best opportunity to recover its functions, by prophylactic supervision of life and habits, by palliative treatment when it offers relief, and by prompt resort to surgical interference when it is called for in the interest of genuine conservatism.



MASTITIS.

By EDWIN ROSENTHAL, M.D.,

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There is, perhaps, no complication of the "puerperium" that reflects so much on the attending physician as that which has its seat in the mammary gland. Indeed, the remembrance of the suffering of this period to the patient is so constant that it is one of the specific reasons given by many why they fear the pregnant state. For the physician an abscess of the breast is the worst thing that happens, and it is the chief cause that brings discussion between patient and doctor, and the most frequent cause for a change. It makes little difference to the patient what may be the cause of her trouble, she looks to the result, and she always feels, and sometimes not without good cause or reason, that the doctor is to blame, and if he be totally innocent, he invariably receives the full share of the blame. The different opinions held on the treatment of mastitis, as a preventative rather than as a cure, has prompted me to record my own experience, and if by this means I can cause discussion, my object will be accomplished. The chief point to be decided is: If mastitis threatens, what is to be done? First, in primiparae; second, in those cases of second, third and so on confinements, where mastitis is always the complication. It is mainly to answer the second question that I wish to confine this paper.

The question of the recurrence of an abscess of the breast depends upon the character of the first attack. As is well known, abscess of the mammary gland affect the parts in three different ways. First—The superficial variety, in which the tissues anterior to the gland proper suppurate. This is the simplest kind, and the use of the gland is not affected, nor is there at all any danger of its reappearance at a subsequent confinement. Convalescence from this permits the use of the gland, so that it would be wrong to consider it of sufficient importance to prevent its use at a future confinement. It needs no further treatment, except the care which is generally bestowed at such periods. Second—The variety in which the gland itself is inflamed. Following inflammation comes suppuration, and the tissues composing the vital parts are affected and destroyed wholly or in part. In this variety, the substance of the gland being so affected, the gland ceases to be of further use, and at any subsequent confinement

should receive the early and prompt treatment of the physician. The third variety is where inflammation and suppuration is deep-seated and posterior to the gland structure. Suppuration invades the tissues of the gland proper, and separates the gland from the pectoral muscles. In this variety the gland may be in part saved. It should also receive the early attention of the attendant, but effort can be made to save the gland, for the nipple and ducts may still be of use. Where, however, congestion takes place, and indications point to a threatened mastitis, it would be wrong to wait until suppuration, but treatment should be begun at once to prevent further flow of milk to the part, and the treatment should be the same as in the case of the second variety. This treatment is to the prompt method of preventing the gland from becoming inflamed, or, in fact, to prevent any milk from forming therein. The simplest method to accomplish this is by the use of adhesive strips, about two inches wide and two feet long. They are placed one upon another, extending from the sternum in front to the shoulder-blade behind for the lower ones; the upper ones extending across the breast to the dorsi muscles. Four to six strips are thus used, and their purpose is not only to compress the gland, but also to elevate the same. They are permitted to stay a week or ten days, unless loosened sooner, when they may be reapplied or fresh ones used. Care is taken that the nipple is not compressed, the contents flowing out as the compression continues. This treatment is begun on the second day after childbirth, and always in the cases as described, for experience has taught me that the waiting or expectant plan of treatment was wrong, for after exposing the patient to the danger of a mastitis, and even to an attack itself, I was forced to put the baby to the bottle. I am therefore firmly persuaded that in such cases it is the proper way, and should be a fixed rule of practice to at once put the baby to the bottle first, then treat the breast by compression, second, and not make any attempt to begin a useless task, one that is not only fraught with danger and suffering, but one that is perfectly useless, as the results have invariably proven failures. This mode of treatment I pursue, whether one or both glands are affected, and I have reason to believe with a lessened mortality to the little ones than I would have had had I attempted to nourish it with a sick breast, a partial diet, or a diet obtained from an anaemic and suffering woman.



THE USE AND ABUSE OF NORMAL SALT SOLUTION.*

By . WESLEY BOVEE, M.D.,

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Inasmuch as the employment of normal salt solution has become so universal, has proven so valuable and has been to some extent abused, we have felt constrained to present this paper, hoping by it to induce a free interchange of opinions on the subject.

The term normal salt solution has been used interchangeably with artificial serum. Various compositions and strengths of the constituent elements of the blood have been used with the name, normal salt solution. According to Kirke's handbook of physiology salt exists in the blood plasma in the proportion of 5.546 parts per 1,000, and thus six-tenths per cent. is a good practical formula. Other ingredients, e. g. egg albumen, have been added to the salt, which really makes an artificial serum, instead of normal salt solution.

Blood transfusion, dating back to ancient Egyptian history, was the forerunner of the employment of normal salt solution, the change being made because of the inconveniences of the former. Thomas Latta, inspired by the chemical researches of O'Shaughnessy, injected salt solution into the veins of his patients. In 1855 cholera was treated by intravenous infusion of salt solution. The fluid recommended by Little for the treatment of this disease was a solution of sodium chloride, sulphate and carbonate, with potassium chloride in water. To-day many surgeons use normal salt solution for nearly all purposes of irrigation and in various other fields, while physicians find many indications for its use. Forty years ago Peaslee used it in his ovariotomy work. In 1879 Bizzozzero and Golgi injected it into the peritoneal cavity for various forms of hemorrhage, which treatment soon proved unsatisfactory. In 1888 Dastre and Loye studied its action on animals and the following year recommended it in the treatment of infectious diseases.

Of the five different routes through which it is introduced, the intra-arterial, suggested by Dawbarn, is considered unsafe in any condition and its practice is not recommended. The subcutaneous route is the most useful for common application. In emergency work the intravenous route will often be needed in severe hemorrhage, and the rectal enema of solution will be found

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of great advantage in nearly all cases in which no bowel lesion is to be combatted. In abdominal surgery the peritoneal cavity will be the place selected for its introduction, and even in vaginal hysterectomy it has been employed by the author, complete closure of the peritoneum following the injection. The intravenous route, usually the most rapid, may be rendered slower than the subcutaneous by the difficulty of finding a vein and the successful insertion of the canula.

The physiological action of normal salt solution is as a powerful stimulant to the cardiac ganglia and the nerve centers. The skin, kidney and intestinal functions are markedly stimulated and other organs are similarly affected. Osmosis is markedly promoted by it and as a result of increased arterial tension the blood supply to the heart muscle is much increased. It has a hemostatic effect when applied locally to raw surfaces, lessening oozing by stimulating and contracting the smaller vessels. According to Hayem and others it augments the number of red blood corpuscles.

It is eliminated by the skin, neutralizing the chemical reaction of the perspiration and heavily loading it with salt. The kidneys carry away a very large proportion of the amount in circulation. The lungs remove it freely, crystals of it having been noticed on the lips for days after its free usage. Autopsies, after its use under the skin, have shown a considerable quantity of it in the intestine, demonstrating that this is one of the avenues for its escape.

In general medicine it has been used in diphtheria, scarlatina, uremia, intestinal hemorrhage of typhoid fever, perforation of typhoid ulcers, cholera, cholera morbus, pneumonia, diabetic coma, haemoptysis, ulcerative endocarditis, poisoning by carbon monoxide, by mushrooms or by alcohol, lead colic, epilepsy, tetanus, pyelitis, renal insufficiency and numerous other affections. In obstetrical practice the conditions in which it is commonly used are sepsis, post-partum hemorrhage and eclampsia. Probably 90 per cent. of the salt solution is used in surgical work. Here it is used to prevent and to reduce shock, in severe hemorrhage, for irrigation purposes, in the treatment of sepsis and other conditions. "Lavage" of the blood has been largely employed in sepsis and sapremia. In many conditions blood letting and saline infusion, either into the vein or under the skin, have been successfully employed. A strong indication for its use should be the heavy drain on the fluids of the body from cholera and cholera morbus. In renal insufficiency the compensatory emunctories are greatly stimulated by it, the skin quickly becomes drenched with perspiration, and almost immediately the renal

function returns to normal or sometimes to an exaggerated degree. In uremia, abstraction of blood and infusion of normal salt solution has become a favored practice. Colon irrigation, with enormous quantities, has proven very successful in the hands of Grandin. In puerperal sepsis its use has been attended with varying success, some clinicians being enthusiastic in this form of treatment. In post-partum hemorrhage it is strongly indicated and has given great satisfaction. Coupled with abstraction of blood, Williams and others have been very successful with it in the treatment of puerperal eclampsia.

In surgery the principal indications for its use are shock, hemorrhage and sepsis. In shock it should be employed early, on the table preceding or during operation, in bad cases, or after operation in milder ones. Severe hemorrhage is to be treated in the same manner, though only after the flow of blood has been checked. If the hemorrhage be severe, the intravenous route may be employed, it being about the only indication for this method. In the author's abdominal work he almost invariably leaves a considerable quantity of salt solution in the peritoneal cavity. Its salutary effect is produced by its action on the abdominal viscera, with which it comes in close contact. To prevent adhesions in the pelvis one or two liters suffices. It hastens the absorption of stray or concealed blood clots, septic foci or escaped fluids, by carrying them well up into the abdominal cavity, in cases of pelvic surgery. In hemorrhage it is probably best to infuse small quantities and often rather than one large quantity.

Judging from the reports of experimenters and personal friends the use of normal salt solution is not a harmless procedure. It is contraindicated in such conditions of the blood as hemophilia, dyscrasias, deficient fibrin, etc. It would seem not unreasonable that such a strong stimulant, coupled with its dilatation of the blood vessels, when used in large quantities, and especially when thrown directly into them, would be very harmful in such conditions of the circulatory apparatus as myocarditis, pericardial effusion, atheroma, arterio-sclerosis, cardiac degeneration, bad valvular lesions, thrombosis and recent cerebral apoplexies. Chronic diseases of the lungs, kidneys or liver, especially if malignant, are apt to be aggravated by it. The presence of toxins in the blood has been found to retard the elimination of normal salt solution and for that reason small quantities only at a time should be employed.

It is necessary to avoid certain accidents and mistakes in using normal salt solution. We must know the solution is sterile when it enters the body, except by the rectum, in which case it is of no moment. Avoid air bubbles entering into the blood ves-

sels or cellular tissue. The fluid must be of a sufficiently high temperature when it enters the body. Chills occur from cold solution and are dangerous to very weak patients. The vessels containing the solution, as well as the needle conducting it, must be aseptic and thoroughly pervious. The tube should have a glass window that the rapidity of the current and the presence of any foreign body may be noted. When the solution is to be introduced through the skin, either into cellular tissue or vein, the local surface should be cleaned as much as the limited time will permit. Probably not more than half a liter should be injected into the tissues through one puncture, as localized necrosis and aseptic inflammation have resulted from overdistension of the tissue spaces. Ordinarily not more than one ounce per minute should be injected into tissue or vein. Pulmonary oedema, dyspnoea, headache, vertigo, mental excitement, delirium, hallucinations, severe pain in the left side, with engorgement of the liver and spleen occur from over-distension of the blood vessels with salt solution.

A PLEA FOR NATIONAL MEDICAL LEGISLATION,*

By R. C. ROBE, M.D.,

Pueblo, Colorado.

The subject of medical legislation is by no means new, yet it should not be considered trite until it shall have been more nearly perfected than at present.

When it is considered that our most stringent medical laws are of but few years' standing, and the result of more than fifty years of agitation, while it may seem discouraging, yet we can hope on in anticipation of better times for our profession. Our country, being new, has had many problems to solve and it has been those which seemed to the public mind to be of most importance that have received more than passing notice. It is a strange fact that the general public considers of secondary importance matters of health and it requires tertiary symptoms to awaken many from their lethargy. But what has been accomplished has been the result of determined effort, and by further perseverance it may be that some time this great subject will occupy its proper place in the public attention.

It is only by continued agitation that great reforms are accomplished and by amendments and re-enactments that any system of laws is perfected. As in tariff and monetary questions, so

* Read before the Pueblo County Medical Society.

in medical our country needs a fixed and advanced policy. That better legislation is needed, even demanded, both as regards sanitation and medical practice, few in the three schools of medicine—regular, homeopathic and eclectic—will deny in order that suffering may be relieved and life prolonged.

My plea is for national legislation rather than for state. The subject is too broad and too far-reaching in importance to be limited by state boundaries. What is good for one state is good for the whole country. A man who is qualified to practice in one section should be able to practice in any other; or a sanitary law which is applicable in one section should be of force in all others. It is easy to see how trouble may arise on the borders of different states both in regard to practice and sanitation. A man may be practicing near the border in one state and have calls into the one or more next adjoining, but cannot accept because he may not have complied with the laws of those states, or if he answers the calls he makes himself guilty of a misdemeanor. Or an epidemic may break out on the border of a state, when the cause may be in a neighboring state and the state authorities be unable to suppress the cause for want of jurisdiction. Dr. J. H. Girdner, in the *North American Review* for December, 1897, cites the following: "Not long ago an epidemic of typhoid fever appeared in Elmira, New York. A number of persons were attacked by the disease in a few days. The State Board of Health discovered that the infection came through the water supply of the town. On investigation of the various streams to ascertain the one which furnished the infection it was found to have its source over the line in Pennsylvania. The difference in the health laws of the two states, the conflict in authority, etc., caused great delay in getting rid of this stream of typhoid fever germs which was infecting all the water that went into the city of Elmira. As a result, hundreds of persons were seized with the fever and a large percentage died. Numbers of such instances could be cited." From this case alone it would seem better to have a central power to act promptly than to have a divided authority, sacrificing human life for fear the rights of one party may be infringed by the other. This question, like that of our system of weights and measures, as well as many others, should have a uniformity over all states and territories.

For several years the American Medical Association has memorialized Congress to establish a department of health. In 1894 the New York Academy of Medicine, together with the New York Chamber of Commerce, drafted a bill providing for the establishment of a health bureau in the treasury department of the United States. The bill in Congress was referred to the

proper committee in both houses. Petitions and letters were sent to our legislators by medical societies and physicians from all parts of the country. Bacteriologists and sanitarians appeared before the committee and urged favorable action. However, the bill was not favorably reported because the great wail came from some sections that it would be an interference with "states' rights." As though the lives of the people were of less importance than this false pride!

Some states have tried to stamp out certain diseases. New York endeavored to quell tuberculosis through its state board. It was found that a fertile cause for the disease was the flesh and milk of tuberculous cattle. Many cattle were destroyed and paid for by the state with the result that the number of tuberculous cattle, like the widow's meal, has never failed, because diseased cattle can be shipped into New York from other states and sold to the state. In the yellow fever epidemic of 1897 it was impossible for the states to properly protect themselves. Complaint was made that the stringent measures of the government interfered with the trade of certain ports. Here again it must be acknowledged that the complaint came from conscienceless people, to whom the almighty dollar was of more consequence than the health and lives of their countrymen. If the stamping out of the deadly disease had been left to state officials the authorities would have been more susceptible to the influences of commercialism and the results would have been more disastrous. In the interior towns trade was suspended in many cases by the foolish and unnecessary action of a scared populace with their "shotgun quarantine."

Granting that the country at large admits the action of the government in quarantining against cholera, yellow fever, bubonic plague and small-pox, yet the number of people who die in the United States from those diseases is insignificant as compared with the number of those who die of tuberculosis, diphtheria and other contagious diseases, the total of which amounts to nearly 200,000 annually. I believe it is the duty of our government to protect the lives of all its citizens and has a right to expect the most hearty co-operation of all the states. The doctrine of "states' rights," when in conflict with federal authority, is opposed to itself in that it makes a part greater than the whole, which, according to our logicians, is impossible.

So we might take a sociological view of the question. The natural tendency of mankind is to segregate, and the more we insist on carrying out the idea of "states' rights" the greater the tendency to segregation. Experience teaches us that separation of peoples tends toward a multiplicity of weakened provinces.

Only in union is power. Patriotism is one of the highest instincts of the human mind and no citizen will love his state less because he loves his country more.

Besides this, there is the question of enormous expense to states in which epidemics occur occasionally, which should properly fall to the federal government. The government has every facility at hand for stamping out rapidly any epidemic that may arise, at a much less expense than individual states, which cannot afford to maintain an expensive machinery to cope with an occasional epidemic.

Dr. C. M. Drake, also writing in the *North American Review*, says: "At the eighth annual meeting of the Tri-State Medical Association of Georgia, Alabama and Tennessee, resolutions were adopted favoring national control of quarantine by the Marine Hospital service in outbreaks of cholera, yellow fever, small-pox and the plague; and a concurrent resolution was recently introduced in the Georgia legislature memorializing Congress to enact additional legislation enlarging the powers of the Marine Hospital service and to give in charge to this bureau all quarantine matters in the state during an epidemic. The press of the South loudly praised these resolutions and the profession, boards of health and commercial bodies in the region affected by the late epidemic of yellow fever have expressed their approval of national control of quarantine." These words from Dr. Drake have the right ring, indicate a move in the right direction, and from a section of the country which has heretofore been averse to this sort of legislation.

If national control of local epidemics is desirable why not as reasonably so of all matters pertaining to the public health?

As to the practice of medicine. I believe if a physician is able to practice medicine in one section of our country he is qualified to practice in any other. Or, to put it differently, if a man is not sufficiently educated to practice medicine in New York, where the laws are stringent, he should not be allowed to practice in Kansas, where the requirements are almost nil.

Some states have passed laws with a view to elevating the standing of the profession; others in self-defense have been compelled to adopt measures to prevent their becoming scavengers for the professional incompetents who are driven about by the winds of medical laws. We need national legislation, not to reduce the number of physicians—that is the lower and selfish motive—but to raise the standard for the entire country and thus provide for a more equable distribution of physicians. Besides this, suppose a man in good standing in the profession, who has been practicing a few years in a state, wishes, for legitimate

reasons, to go into another for permanent residence. He finds himself confronted by some state examiners, with their board, which may prove an impregnable barrier in his way. I venture the assertion, without fear of successful contradiction, that not 10 per cent. of the physicians in the states of New York or Minnesota who have been practicing for ten years could pass their own state examinations, and I would not except the members of the faculties of their medical colleges. A somewhat similar statement was made by a member of the Illinois Board of Health in 1895, when the board was bitterly attacked by the faculty of the Woman's Department of the Northwestern University Medical school for licensing on a good examination some applicants who had been refused diplomas by the faculty of the above named school for alleged incompetency. This only goes to show the great difficulty of keeping in mind all the thousands of facts and other things which are expected to be memorized by the medical student and be expected to pass an examination on them a few years later. And yet all will agree that a man is a vastly better physician on account of the experience than when he is a recent graduate. So then, I believe, a license good in one state or section of the United States should be good in any other section, on being properly recorded. This could easily be accomplished if we had a national board of medical examiners, with a member or members in each state to examine each candidate. Then if the applicant is successful let him go where and when he will.

It would be necessary for such a board to have defined for it or have power itself to define what preliminary education should be acquired before an applicant should be eligible to examination. I believe no one who has not had at least two years of training in a literary college—Johns Hopkins requires a bachelor's degree for entrance—and four years of study in a medical college, should be admitted to an examination. The law should be specific in stating what literary branches should have been mastered, as well as to define the standard required to make a medical college "reputable." Then proceed to examine the applicant on the branches usually taught in a medical college, and foreigners on the English language, having respect for the three schools now recognized, viz: regular, homeopathic and eclectic.

The fee for this examination should not be too high; \$10 is enough, for, as a rule, medical students have exhausted their resources in pursuing a long and expensive course of study and can ill afford the expense of high post-collegiate fees for licensure. Besides, high fees, whether in medical colleges or for license, savor too much of commercialism and tend to exclude the worthy

but poor and build up an aristocracy in a profession which should be kept on the high plane of intellectuality. I believe the fees should more often be reduced than increased.

Having met the rigid requirements, the licensed physician should be as rigidly protected against every agency which, working by illegitimate means, might take away from the income which is properly his. I would include every one who, unlicensed, makes a business of treating the ills of life, whether by medicines or not, and receives a compensation, either by a charge or by gifts. In this category I should place midwives, christian scientists, divine healers, magnetic healers, osteopaths, rupture specialists, street venders of medicines and medical appliances; limit the man with the patent medicine or proprietary article with a copyrighted name to the treatment of such persons as come under his individual care and revoke the license of any physician prescribing their remedies. Perhaps few of us realize the extent of practice which the average druggist enjoys, and the injury it works to the medical profession, and oftentimes to the patient, when the druggist would get as much or more out of the case if it had first passed through the hands of one competent to prescribe. In the column of "News Notes" in the Chicago Medical Record for December, 1897, is the following: "A New York druggist has been fined \$150 for practicing medicine without a license. * * * The Medical Society of the county of New York was the plaintiff." Another item under the same heading says: "Two cases are now being heard in Brooklyn, N. Y., in each of which a woman is suing a druggist for \$5,000 and \$10,000 respectively for prescribing medicine which she alleges caused permanent injuries and impairment of health." If the New York druggists are amenable to the law governing the practice of medicine, why not those of any other section of our country? Permit these people to treat the diseases of the body and imagination if they choose, but let the same requirements be made of them that are placed on the licensed physician.

It is argued by some writers that medical legislation properly belongs to the states, and they propose a reciprocal feature, by which physicians from one state may be licensed by another without examination, provided the requirements of the two states are practically the same. The present law of the state of New York contains such a clause. But why complicate matters when it can be done in the simplest possible way and for the whole country by an act of Congress?

Let us have a National Health Bureau, with a board of medical examiners and a sanitary board. Let their powers be extended by the most liberal and highest forms of legislation consistent

with the advances and discoveries of modern science. Give them the best equipment possible by which to follow out original research in all departments. And have sent to every physician in the land, free of cost, copies of their reports, as they may be issued from time to time.

If every medical society, board of health and medical college faculty would bring their influence to bear on our national law-making body, with a common understanding as to what should be embodied in a proper medical law it might be accomplished. The medical profession, as a class, has never been looked upon as a strong factor in politics, but if, like the Roman plebeians of old, who refused to fight the battles of the aristocratic patricians, except they shared the spoils, we, adopting the same course, might gain our end. There are enough of us by presenting a solid phalanx to make the army of the office holders surrender to our demands.

However, in the absence of national legislation for the present, Colorado, on account of climatic and other natural advantages, has peculiar reasons for placing restrictions on the practice of medicine other than those now in force. A bill such as the one introduced at the last meeting of the Legislature would bring present relief. The bill was deficient in a few points, chief among which are the failure to specify the amount of preliminary training required of an applicant, and what constitutes a medical college in good repute. Also it fails to protect against the charlatans who are the most formidable enemies of our beloved profession. But as I am told that it was the proposed restrictions on this latter class that defeated a former bill, it may be the best that is likely of adoption for the present.

REPORT OF A CASE.

By B. A. ARBOGAST, M.D.,

Breckenridge, Colorado.

The following case I think of sufficient importance to report. On the morning of October 28th, at 4 o'clock, I was called with all haste to see Mrs. L——, who was not expecting the present "trouble" for at least a month yet.

On entering the room, on arrival, the very significant sound of "last pain" was heard. Hastily relieving myself of coat and wraps, I proceeded to investigate what she said "had come." I

found a lively little girl baby, with cord twice around neck, but not taut. I hastily severed cord and wrapped up child to make it comfortable, as the mother seemed easy and nurse had not yet arrived. On attempting to extract placenta something came down that horrified me. It came easy, and I felt as though I was extracting the mother's "back bone" from the bony-like feel, and then still more was coming. I caught my breath and began extracting still more, at same time notifying her that we had something extraordinary here. On examination I found I had in the first an emaciated foetus of about eight or ten weeks and the other one of about five months, intact in bag of uterus, and all three placentas firmly attached together with the dead foetuses, cords still attached to placenta, which I have preserved. It is not phenomenal to have triplets, but the two dead foetuses at different stages of development and both badly decomposed, and one living that is now healthy and plump, and the mother made a good recovery, seems a little out of the way.

AN ARMY LETTER TO J. N. HALL.

Dear Doctor—My long silence has been due to several factors, chief of which is work. Not amateurish nor dilettantish, but good, sound, wholesome work that makes one think thoughts. When I tell you that I have two whole wards all to myself, with fifty-seven patients in one and forty-eight in the other, you will appreciate the fact that I am earning every cent of my salary, and when night comes I am glad to creep into my tent and sleep solidly, with no time to dream.

You see that while Uncle Sam prepared a very elaborate hospital for the comfort and convenience of his patients, and supplied a superb equipment, everything, in fact, that money can secure, he thought so little of the soul of the movement, viz: the medical staff, that every member of it, from the gentlemanly Colonel Woodhull down to your humble servant, must perforce make his quarters in tents, and it is getting pretty cold here now. We expect to house ourselves in a building that is being constructed for our use; evidently an after thought on the part of our dear old Uncle Sammie. We have to feed ourselves out of our salary, as the old aforesaid avuncular relation does not think he can afford to feed us and give us the princely salary he does.

From the number of patients I have you must not suppose that they are all in the last stages of typhoid fever; far from it.

The great majority are convalescents, though there is a great deal of work even with them; that is, largely of a clerical nature, yet they must all be watched closely for a week or ten days to be sure of no reinfection, and a history of each case must be elicited and written up, with a diagnosis. Especially is it irksome when they apply for furloughs, as we must scrutinize every soldier with great care, as it is our wish to let no sick man escape. Then there are the sick ones in my two wards. I have nine cases of rather severe typhoid; about six cases of severe remittent fever; two cases of phlebitis, a result of typhoid—one is going to die, as he now has septicemia; half a dozen cases of rheumatism; a couple of cases of pleurisy; several obstinate cases of diarrhoea; a few cases of dysintery; a bad case of paralysis; a few traumatisms; some hypostatic pneumonia; one case of gangrenous lung, and several others, with lots of asthenia cases, with subnormal temperatures; so you can see that I am fairly busy. My two wards are a quarter of, or rather one-eighth of a mile apart, so I get lots of exercise. We have ten physicians, with work for thirty. I should like to write up some of the cases, but, good Lord, I haven't the time. To give you an idea of a day's work I will give you the last day's duties.

Reveille at 6 a. m.; cold and gray was the morning; shaved in my tent, then took a good cold bath, and made a careful toilet; black shoes, white gloves and not a speck of dust on my uniform. Breakfast 7 sharp, and 7 means 6:60 here, Smoked for half an hour; then reported to the colonel as officer of the day. Inspected the kitchens and raced over to one of the wards and signed about twenty papers; took report of nurses, looked over the more serious cases, ordered a change here or there, answered about 20,000 questions. Escaped at 11, and after a little inspection I got over to my other ward; signed more papers, when an orderly informed me it was time to receive some reports, which I attended to; then found it was time for luncheon, viz: 12:30. While at lunch an orderly informed me I was wanted in one of my wards; I got there three minutes after the patient had died; returned and finished my lunch and in the afternoon made a "post;" found perforation peritonitis, with an enormous hemorrhage in bowel. Bugle sound, and I had to receive muster; then over to my other ward, and found enough work to keep me busy till dark; then mess. We don't dine in the "aahmy," we mess. After mess and a smoke I went through one of the wards; then taps, or 9 p. m. Then I went over to the other ward and gave some instructions and lay down with my clothes on, ready for a call at any of the wards, as I was officer of the day. At midnight I arose and went through every ward and did some prescribing and directing, etc.

At 3:30 laid down and was called at 5, as a patient in some ward was having a hemorrhage. I attended to him; then received the report of the head steward at reveille, viz: 6 a. m.; took a bath, shaved, etc. Don't you think I earned my little \$5.00? But with all the hard work I am enjoying it as I never enjoyed anything before. The colonel is one of the most thorough gentlemen I ever met, and when I look back and remember that it is to you I am indebted for knowing him, I feel like shaking you by the hand.

Regards to Hopkins and Raynor.

FRED A. HODSON.

The Josiah Simpson General Hospital.

The Urine in Pneumonia. — The marked diminution or absence of chlorides, followed by an increase after the crisis, is a well known clinical and prognostic sign in pneumonia. A newly mentioned symptom in this connection is the change in reaction of the urine, from strongly acid to neutral or even alkaline during the stage of resolution, a change which is ascribed to the reabsorption of sodium in the exudate.

Jewett's "Practice of Obstetrics."—By American Authors, is forthcoming at an opportune time. Its subject progresses so rapidly, particularly in this country, that a completely new work by acknowledged masters of all the subjects it comprises will be welcomed. It will be a practical book as its title indicates, yet its suitability for the obstetrician will not lessen its value as a text book. Indeed, it numbers among its contributors the professors in many of the leading medical colleges, so that it will doubtless have widespread success in the student world. The publishers have spared nothing in typography and illustration compatible with issuing the volume at a price within the reach of all.



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EDITORIAL DEPARTMENT.

Boulder Hospital. We recently paid a visit to the town of Boulder, and were surprised to find there one of the most completely equipped small hospitals that it has ever been our pleasure to visit. The hospital is modern and perfect in all of its appointments. There were two patients in the hospital. We could not, while looking through that beautiful little hospital, help thinking of an editorial, which we were unfortunate enough or at least permitted to write, concerning the former hospital which existed in this place some years ago. It was at a time when that anomalous institution, that is, we say anomalous for we have heard it called by that name—we have also heard it spoken of as atypical and by one (now deceased) as unique—existed and flourished with about two full-fledged professors, no assistants and no

adjuncts, with a hospital to furnish clinical instruction, whose sole occupant was an aged mule, but we will not further pursue this subject of ancient history.

The Boulder Hospital is all right and we understand that the medical department is in a flourishing condition, and that they have at least one professor for each student. In this respect perhaps the advantages are not quite equal to one of the Denver schools which can boast of, at least, three professors for each student.

During our visit to Boulder we also had the pleasure of visiting the sanatorium and were very kindly received by Dr. Riley, who showed us through all of the various departments and was exceedingly obliging, explaining to us the entire institution, its objects and plan of operations.

1898-1899. 1898 is no more and we are just starting upon 1899. What this year has in store for us, our subscribers and freinds, none is prophet enough to dare to predict, but certain it is that the possibilities will be great. It is also certain that the year will be full of disappointments and unrealized anticipations. Each one of us should, after a backward glimpse just long enough to learn the lessons taught by the past, press onward with his work and meet and surmount the difficulties as they are encountered, with "charity for all and malice toward none," adopting for our motto, possibly our religion, do all the good you can, to as many as you can; do as little harm as you can, to as few as you can, and do not talk.

The Proper Diet in Given a true case of this form of
Dietetic Albuminuria. albumin in the urine, the regulation of the patient's diet, becomes, of course, the most important indication. Dr. J. Howe Adams (*Southern Medical Journal*, October) says that vegetables, especially green vegetables and

fruit, should be freely allowed. Tea, coffee and cocoa are sanctioned, if sweetened but slightly, as are also small quantities of oatmeal, buckwheat, corn cakes, rice, bread and butter, oysters and fish. The white meat of poultry and game may be eaten in moderation, but mutton and beef must be tabooed, on account of their large percentage of nitrogen. Milk, says the writer, does not seem to be of special value in these cases. The yellow parts of eggs may be eaten in moderation. Sugars, and substances like beets and rhubarb, containing much of these, commonly aggravate the symptoms. Salt should be given freely.

How to Avoid Tuberculosis. In the *Medical Record* of October 22d, Dr. H. Tucker Wise thus summarizes the principal points of prevention: 1. A generous dietary of nitrogenous food. 2. Free ventilation of dwelling and sleeping rooms, by open windows with wire gauze blind. 3. Adequate house heating in winter. 4. Boil all milk or cream previous to using. 5. Try and obtain eight hours sleep every night; if not sound sleep, contract hours to seven and rest during the day. 6. If debilitated with weak digestion, take rest in the recumbent position a quarter of an hour before and after meals. 7. Wear the loosest clothing possible, especially around the waist and lower ribs, to afford absolute freedom in respiration. 8. Take systematic daily exercise in the open air on foot. 9. If means and station in life admit of a long holiday, from time to time, live during fine weather in a tent in the open air, or in a summer house for most of the day; and if unemployed, pursue a hobby to occupy the mind.

Leucocytosis in Whooping Cough. Dr. H. Meunier (quoted in *Medical Record*) advises a blood examination in making an early diagnosis of pertussis, as in this disease there is a constant and intense leucocytosis, beginning long before the characteristic whoop appears. In the catarrhal stage

there are about 22,700 leucocytes per cu. mm.; in the whooping stage about 40,000; the leucocytosis is due principally to increase of lymphocytes. The blood test, of course, is particularly indicated when isolation is to be practiced.

Treatment of Hemicrania. The majority of the subjects of migraine seem to be of a gouty predisposition, and for these proper habits in eating and drinking must be inculcated, writes Henry M. Lyman (*Clinical Review*, December). Red meat should be used very moderately, with almost total abstinence from eggs, beef, mutton, veal, tea, coffee, wine and tobacco. The patient should be instructed to drink freely of pure water, in which a lithia tablet may be dissolved to insure a larger consumption of the liquid than would otherwise occur. During the summer, in constipated cases, it is well to prescribe a morning dose of sodium phosphate (one or two drachms in a pint of hot water) or a similar dose of Carlsbad salts or a laxative, such as rhubarb, aloin, cascara, and podophyllin, may be given for a time in place of the more efficient mineral salts, which are apt to give rise to gastroenteric catarrh if employed indefinitely. An occasional dose of calomel or blue pill is also useful as a prophylactic.

Treatment of Cocaine Poisoning. A serious case of this kind is related by Dr. Edward F. Brennan in the *New York Medical Journal* for November 19th, in which the marked dyspnea and cyanosis were treated successfully by full hypodermic doses of morphine sulphate chiefly. In comparing the physiologic action of morphine and cocaine, he shows that it first contracts the pupil, is a sedative to the nervous system, makes the pulse and respiration slower and fuller, and stimulates, but finally depresses, the motor tracts and reflex centres. Cocaine, on the contrary, dilates the pupil, causes excitation of the

nervous system and rapid and feeble respiration, with increased strength and frequency of pulse, and stimulates the motor tracts and reflex centres. The writer therefore claims that morphine is the most perfect physiologic antagonist in cocaine poisoning.

Smegma Bacilli in Sputum. Such an occurrence is rare, but possible, particularly in putrid sputum containing much fat and myelin.

Fraenkel (quoted in *Columbus Medical Journal*) recommends the procedure of Honsell, which consists in washing the preparations after the carbolic fuchsin stain ten minutes in a mixture of hydrochloric acid and absolute alcohol. If their red color disappears, one has almost certainly to do with smegma bacilli.

A Rifle Ball in the Heart for Thirty-Seven Years. Dr. O. B. Beer of French Creek, W. Va., reports in the *Cincinnati Lancet-Clinic* a recent autopsy upon an old soldier, who had been wounded by a "bushwhacker" in 1861. The ball, a small one, such as used in muzzle-loaders, had entered the thorax posteriorly on the left side, passing through the left lung and pericardium, and had embedded itself in the wall of the heart near the apex. There were never any symptoms pointing to the heart while the patient was alive. After recovering from the effects of his wound, he had served in the army till the close of the war, and then worked on a farm until shortly before his death, which was due to cancer of the arm.

The Diagnosis of Intestinal Obstruction. In a paper on "Ileus," read before the Cleveland Medical Society, Dr. John B. Murphy, of Chicago, (*Cleveland Journal of Medicine*, November) lays special stress upon the time, onset, frequency and persistency of vomiting and the character of the vomit. In intestinal obstruction and peritonitis it usually occurs early, and is the first symptom, pain being

absent in strangulation of the intestine. In intestinal obstruction and in general peritonitis the vomiting as a rule continues to death; in local cases it lasts only an hour or two—the patient rarely vomits more than once in appendicitis, the most classic variety of local peritonitis. If the vomiting continues in appendicitis, says the writer, one may be certain that there is a complicating streptococcic infection of the peritoneum. As to fecal vomiting, he has seen but two true cases thereof, and insists that this symptom should never be waited for before operating. The pulse, he maintains, is not a guide in intestinal obstruction, and the skin is of even less diagnostic importance. Dr. Murphy considers the temperature so important a matter that he frequently telegraphs for the same before responding to a consultation call. There is never any elevation of temperature in primary mechanic obstruction, whereas in septic ileus and in peritonitis there is always fever at some time. In the later stages of peritonitis the temperature is often normal or subnormal, and *per contra* fever may arise toward the end in intestinal obstruction, with perforation or infection through the impaired wall. Local or general tympany is also important and often seen in connection with circumscribed dullness. This last is irregular in ileus, whereas it is regular in peritoneal effusions. Stethoscopic auscultation, the writer holds, is of great importance in making a diagnosis of true mechanic obstruction, in which there is increased peristalsis, while in septic ileus there is paralysis of peristalsis.

Brain Abscess of Aural Origin. Dr. J. F. McKernon (quoted in *Journal of Eye, Ear and Throat Diseases* for October) summarizes the indications for exploration of the cranial cavity in cases of suspected abscess, in connection with ear disease, as follows: 1. The presence now or heretofore of chronic otorrhea. 2. Persistent headache—general and localized—the most important symptom. 3.

Restlessness and irritability of temper. 4. Tenderness of the affected side to percussion. 5. Nausea, vomiting and vertigo. 6. An almost persistently low temperature. 7. A slow pulse, with stupor later. 8. Optic neuritis—may be present or absent.

The Causes of Presidential Deaths. Washington, says the *Massachusetts Medical Journal*, died of laryngitis; John Adams, of senile debility; Jefferson, chronic diarrhea; Madison, old age; Monroe, general debility; J. Q. Adams, paralysis; Jackson, consumption; Van Buren, catarrh of throat and lung; W. H. Harrison, pleurisy; Tyler, "mysterious disorder like a bilious attack;" Polk, cholera; Taylor, cholera morbus; Fillmore, paralysis; Pierce, gastritis; Buchanan, rheumatism and gout; Lincoln, assassinated; Johnson, paralysis; Grant, cancer; Hayes, paralysis of heart; Garfield, assassinated; Arthur, Bright's disease.

The Diagnosis of Pulmonary Tuberculosis in Young Children. Infants, as is well known, do not expectorate, but swallow the sputum, hence it is not easy to obtain specimens for microscopic examination. Meunier (quoted in *Medical News*) overcomes this difficulty by washing out the stomach with the tube, the swallowed sputa being easily recognized in the contents thus removed. Of fifteen cases in which this method was carried out and subsequently confirmed by post-mortem examination, the microscope failed to reveal the presence of bacilli in only one instance, when pulmonary tuberculosis existed.

A New Method for the Arrest of Nasal Hemorrhage. Arthur W. Watson (*University Medical Magazine*, December, 1898) describes the following simple procedure: A ligature is passed through the nose in the same manner as for posterior

plugging. A piece of gauze is folded to form sixteen to twenty-four thicknesses (according to size of nose), making a pad about an inch and a half long and three-quarters of an inch wide. The ligature is tied around the middle of this gauze pad, which is then drawn into the nasopharynx by traction on the ligature, aided by the finger, and then into the posterior part of the nasal cavity. As the pad enters the nose the ends fold back, thus doubling its thickness and making pressure on the lateral walls. The advantages claimed for the method are simplicity, ease of performance, absence of pain, freedom from dangers attending posterior plugging, and in removal of the pad absence of the liability to renewed hemorrhage that is present with anterior packing.

**Chronic Coffee
Poisoning.**

Gilles de la Tourette notes the resemblance of caffeic dyspepsia to alcoholic gastritis, both being characterized by morning phlegm, radiating epigastric pain, coated tongue, distaste for solid food, and later nausea, vomiting and acid eructations. Recurring slowness of the pulse is the most frequent circulatory manifestation. The nervous symptoms are most important, including insomnia or frightful dreams, empty feeling in head, or vertigo on standing upright, marked tremor of lips, painful muscular cramps in calf and thigh, especially at night, and sometimes marked deficiency in sensory power. Discontinuance of the coffee habit is followed by a rapid subsidence of all symptoms.

**The Common Sense
Treatment of Rheumatism.**

Waugh gives the following contribution in the *Medical World* of recent date: "The acute, febrile form is easily quelled by the alkalies or the salicylates; the subacute type is controlled by the iodides, but the chronic variety has heretofore proved refractory to every remedy or combination of remedies. For this try the vegetarian diet, intelligently applied.

Don't simply direct the poor man to avoid meat, but prescribe a vegetable diet that will be sufficiently nutritious, wholesome and palatable. Teach him to eat it properly. Give him plenty of water. Dress him in wool. Arrange his personal hygiene to suit the man and his occupation, not on your idea of what ought to be. I am in error if you do not find this plan more effective than any combination of drugs."

**Non-Medical Treatment
of Constipation.**

A practical contribution to this subject is made by George Roe Lockwood, in the *Medical News* of Dec. 10th, 1898. He says that coarse vegetables, such as spinach, Brussels sprouts, turnips and carrots, should constitute a large proportion of the diet, preferably in pure form. Coarse, porous, cereal breads, one day old, are also useful. A glass of cold water on rising in the morning is of great service in increasing peristalsis, but exerts a depressing effect upon gastric secretions. A bulky diet, as above mentioned, is contraindicated in cases of inflammation or muscular insufficiency of the stomach. Sugars are a very efficient means of combating constipation, and are best given in the form of honey, milk, sugar and fruit compotes. The writer recommends as the simplest and best remedy a tablespoonful of honey in half a glass of warm milk on rising in the morning. A very good compote is two parts of stewed prunes and one of stewed figs, sweetened with lactose. Buttermilk, three glasses daily, is a reliable laxative, and kumyss has a similar, somewhat stronger effect. Fats are indicated in large quantities, best given as butter, 2 to 4 ounces daily, and in young subjects this simple addition may be sufficient. Local massage and electricity have proved disappointing in the author's experience. General exercise, particularly bicycling and golf, are of great service, together with local exercises, such as the raising of the leg slowly to the vertical position and dropping it to the bed again. Artificial abdominal

supports are indicated in downward displacements of the stomach or colon, and in weakness of the abdominal wall or separation of the recti muscles. The writer says that he can strongly recommend the before breakfast spinal douche in atonic forms of constipation. While the patient sits in water as hot as can be borne, the spine is first sponged with hot water, then a pitcher of cold water is poured from a considerable height upon the back, which is then rubbed briskly. In conditions of intestinal spasm, usually due to gastric hyperacidity, sedative remedies are indicated. An efficient appliance is the Priessnitz-umschlag, which consists of two thicknesses of flannel large enough to cover the abdomen, wrung out in hot water, covered by oiled silk and applied to the abdomen at night by means of a binder. Oil irrigations, first employed systematically by Kussmaul, yield brilliant results, and are applicable alike to atonic, spastic and inflammatory conditions. A rectal tube of large caliber, with a large lateral opening, is introduced six to eight inches into the rectum, and a half pint of cottonseed oil is slowly allowed to enter. The patient receives the injection at bed time, by preference in the Sim's position, with the hips elevated on two pillows and the muscles well relaxed. He remains thus for ten minutes, then lies on his back for the same length of time, and finally lies on the right side for ten minutes again, thus admitting the oil to all parts of the colon. No immediate results are usually observed, but the patient will have a normal movement for three to five successive mornings without straining. Ordinarily a repetition of this treatment every five days is sufficient.

**Postponement of the Third
Pan-American Medical Congress.**

THE INTERNATIONAL
EXECUTIVE COMMISSION OF THE PAN-

AMERICAN MEDICAL CONGRESS—Office of the Secretary—Cincinnati, Nov. 5, 1898.—My Dear Sir—I have the honor to announce that in April, 1898, I received from

Dr. Jose Manuel de los Rios, chairman of the committee on organization of the Third Pan-American Medical Congress, a request that, in consequence of the then existing rebellion in Venezuela, no definite arrangements be made at that time relative to the meeting of the Congress previously appointed to be held in Caracas, in December, 1899.

The following communication relative to the same subject is just at hand :

CARACAS, Sept. 25, 1898.

Dr. Charles A. L. Reed, Secretary of the International Executive Commission, Cincinnati, Ohio.

Dear Sir—After having sent my communication dated April last, I find it to be my duty to notify you that, although the considerations pointed out in it have already ended, our country has been scourged by smallpox, which has taken up all our physicians' activities and time, depriving them of going into scientific works. And, as that state of mind of our people and government after such calamities as war and epidemic, would greatly interfere with the good success of our next meeting, I beg leave to tell you, in order that you will convey it to the International Executive Committee, that our Government and this Commission would be grateful to have the meeting which was to take place in Caracas in December, 1899, adjourned for one year later. I am, dear Doctor,

Yours respectfully,

THE PRESIDENT.

[Signed]

Dr. Jose Manuel de los Rios.

In accordance with the request of the Government of Venezuela, and of the Committee on Organization, the Third Pan-American Medical Congress is hereby postponed to meet in Caracas in December, 1900.

 For the International Executive Commission.

CHARLES A. L. REED, Secretary.

The Pretuberculous Stage of Phthisis. Dr. Henry P. Loomis has a rational paper on this subject (*Medical Record*, Dec. 10, 1898),

of which he provides the following summary:

1. It is possible in many cases, especially in chloroanemics to diagnosis phthisis previous to the appearance of physical signs of tubercle bacilli in the sputum.

2. Weight, respiratory capacity and chest measurement have no value in establishing the possibilities of the development of phthisis in themselves, but must be considered in relation to the height of the person, when they furnish three important aids to diagnosis.

3. Corpulence is obtained by dividing the weight expressed in pounds by the height expressed in feet (in a normal man this should be 26; in a woman, 23).

4. Thoracic perimeter is found by taking two measurements of the circumference of the chest—one at the moment of forced expiration, the other at the end of a forced inspiration. The average of these two measurements should never be less than half the height.

5. Vital capacity is the amount of air expressed in cubic inches which can be exhaled after a full inspiration. Normally it should bear the relation to the height of 3 to 1 for a man, and 2 to 1 for a woman, (i. e., for every inch of height there should be three cubic inches of vital capacity).

6. Chloroanemia and persistent and unexplained disturbances of the digestive system are symptoms of the pretuberculous stage of phthisis.

7. There are two characteristics of the pulse found in the pretuberculous and early stage of phthisis: (a) Change of position has practically no influence on its rhythm; (b) relative feebleness of arterial pressure.

The Stigmata of Nervous Syphilis. The differentiation of cerebral syphilis from other forms of brain

disease is of supreme importance from the therapeutic standpoint. This subject is one which has attracted much attention of late, and a num-

ber of contributions thereon have appeared in late journal literature. None of these articles we have seen presents a clearer description than that under the above title by Dr. Wm. J. Rothwell, in the *Journal of American Medical Association*, of November 19th. His summary of the differentiation between syphilitic and parietic dementia reads as follows:

1. Headache is present in both affections, but has different characteristics in each. In specific dementia it is of the usual persistent, paroxysmal, nocturnal type, while in paresis, though a very few severe spells are common, they never occur in long continued series.

2. Syphilitic dementia pursues a characteristically irregular course. Paralytic phenomena, which belong to the final stage of paresis, may even precede the mental degeneration of the specific malady. The course of mental decay in paresis is progressive, with but few exceptions, while that of specific dementia is variable. In the latter some symptoms may wholly disappear, to be replaced by others of a very different nature. Great mental improvement may take place, the mind may clear up and lucid intervals of long duration supervene.

3. If, in a doubtful case, ptosis, strabismus, aphasia or other paralytic symptoms develop, and especially if it be short-lived, the diagnosis is rendered certain, for suddenness and brevity are the brands of the motor phenomena of cerebral syphilis.

Ichthyol in Acute Laryngitis.—Cieglewitz (quoted in *Philadelphia Polyclinic*) has obtained brilliant results with ichthyol in acute laryngeal catarrhs and spasmodic croup, when inhaled by means of a Richardson atomizer as a 2 per cent. solution in cold water. The inhalations are practiced from three to five minutes at a time, once or twice daily. In some cases a single treatment sufficed to cut short an attack of coughing.

EDITORIAL ITEMS.

Enlarged Cervical Lymph Glands.—In children these are very often due to the presence of hypertrophied tonsils or adenoid growths.

Another Consolidation.—After the first of January the *Philadelphia Polyclinic* will be absorbed by the *Philadelphia Medical Journal*.

Dr. J. N. Hall a Medical Editor.—We note with pleasure that Dr. Hall is now associate editor of our breezy exchange, *The Medical Fortnightly*.

An Amalgamation.—The *Canadian Medical Review* and *Canadian Practitioner* have been consolidated into one journal under their joint names.

Urticaria.—Sodium phosphate in drachm doses, after meals or oftener, is said to effect a cure within twenty-four hours in 90 per cent. of cases.

Acute Coryza.—Dr. Wood, says the *Medical Summary*, commends the local application of pure boric acid as an abortive treatment, adding morphine if pain ensues.

Ammonia in Human Blood.—In normal venous blood the amount ranges from .06 to 1.3 mgm. per 1.00 c.c. In fevers it may be greatly increased or as much diminished.

A Medical College in Ashes.—The building of the Medical Department of the University of Tennessee, at Nashville, was consumed by fire on the 11th of last month.

Compulsory Antisepsis.—There is a French law which requires, under penalty, that a surgeon shall sterilize his instruments before each and every surgical operation.

Dr. John B. Hamilton.—Dr. John B. Hamilton, editor of the *Journal of American Medical Association*, is dead. The Bulletin states that the cause of his death was peritonitis.

Coal Gas Poisoning.—In poisoning by carbon monoxide or illuminating gas, good results are claimed from the injection of Marchand's hydrogen peroxide into the veins and per rectum.

The Medical Dial.—This is the name of a new monthly journal published in Minneapolis and edited by Dr. J. W. MacDonald. The first number is quite creditable to all concerned.

A Royal Woman Physician.—Queen Amelia, of Portugal, who has recently graduated in medicine, has for her first patient her husband, King Charles I., whom she has been treating for obesity.

Archives of Pediatrics.—With the advent of the new year this pioneer pediatric journal becomes solely the property of E. B. Treat & Co. The present able editorial management continues.

Fissured Nipples.—Dombrovsky (quoted in *New York Medical Journal*) recommends painting the nipples several times a day with a solution of 2 to 5 per cent. potassium permanganate solution.

A New Method of Restoring Muscular Function in Infantile Paralysis.—Noble Smith advocates division of the tendons of the contracted muscles as a means of improving nutrition and restoring muscular power.

The Differential Use of Digitalis.—Hare remarks that the infusion is to be employed when a diuretic effect is desired, and that weak heart with high tension should be treated with the fluid extract or tincture.

Relief of Chordee.—Dr. George W. Ely reports in the *New York Medical Journal* a severe case of chordee, which large doses of bromide had failed to prevent, but which was relieved at once on smearing the glans with vaselin.

The Crusade Against Consumption.—The *Medical Record* states that there are in existence at the present time about one hundred sanatoria for consumptives, forty-three of which are in Germany and twenty in America.

Charcot's Monument.—On Dec. 4th the monument to the great Charcot, erected near the Salpetriere, was formally unveiled with imposing ceremonies and fitting addresses by Prof. Brouardel and other leading French educators.

The Omaha Meeting.—The Western Gynecological and Surgical Association met in Omaha, Dec. 28 and 29. The meeting was well attended and the papers were of unusual interest and excellence. The next meeting will be held in Sioux City.

Renal Elimination.—The activity and eliminating power of the kidneys, says the *Clinical Review*, can readily be determined by giving the patient ten grains of potassium iodide, which should be detected in the urine in from twenty-four to thirty-six hours.

A New Symptom of Paralysis Agitans.—Purves Stewart mentions an early symptom which he thinks has not been described before. It consists in an uncomfortable cramp-like flexure, during walking, of all the toes except the hallux, which is usually hyperextended.

Wood on Strychnine.—H. C. Wood believes in large doses of this drug. He is accustomed to give 1-20 grain three times a day, the last dose by 3 p. m., so as to avoid insomnia. This amount every four hours, he says, is not immoderate in pneumonia or low fevers, particularly in the aged.

How to Remain Young.—To retain perpetual youth, says the *Medical Age*, avoid all foods rich in earthy salts, use much fruit, especially juicy, uncooked apples, and take daily two or three tumblerfuls of distilled water, with about fifteen drops of dilute phosphoric acid in each glassful.

Dr. C. K. Fleming.—Love's *Medical Mirror* has the following appreciative comment upon Major Fleming: "He is one of the front rank men of the Centennial State, and to rank well in Colorado requires first class ability. Dr. Fleming, although young in years, has achieved much and is a credit to the medical profession in general."

Color Changes in Carbollic Acid.—We are all familiar with the red coloration developed in a bottle of phenol that has stood for some time. Dr. A. J. Horn (*Philadelphia Medical Journal*, Nov. 26th) attributes this change to chemical action upon the cork, since when contained in glass-stoppered bottles the fluid remains clear and colorless.

Preventive Surgery.—On the presumption that appendicitis causes 50,000 deaths in the United States each year, S. Pollak (*American Journal of Surgery and Gynecology*) advocates the compulsory removal, during childhood, of all appendices vermiformes. We suppose Dr. Pollak means this as a joke, as he is himself an ophthalmic surgeon.

A Vaginal Parasite in the Stomach.—Strube (quoted in *New York Medical Journal*) reports a case of carcinoma of the cardiac portion of the stomach in which the gastric contents included great numbers of the trichomonas vaginalis. It was not found in the stools, and hence did not ascend by the intestinal route. It disappeared when the stenosis had been overcome.

False Angina Pectoris.—For this complaint Dr. Norbury recommends to give nitrite of amyl, antipyrin or bromide of potassium and to apply ether or chloride of ethyl vapor to the pericardium. A useful prescription, he says, is a drachm each of Hoffman's anodyne and tinctures of valerian, of digitalis and of belladonna, of which mixture ten to twenty drops may be taken at the beginning of the attack.

BOOKS.

Diet and Food Considered in Relation to Strength and Power of Endurance, Training and Athletics.—By Alexander Haig, M.A. and M.D., Oxon., F.R.C.P.; Physician to the Metropolitan Hospital and the Royal Hospital for Children and Women; Author of "Uric Acid as a Factor in the Causation of Disease." With Five Illustrations. London: J. & A. Churchill, 7 Great Marlborough Street W. 1898. Philadelphia: P. Blakiston's Son & Co. Price, \$1.00.

This little brochure contains the essence and practical application of Haig's epoch-making researches in uricemic conditions. Whatever view one may hold of some of the author's theories, the fact remains that the diet which he advocates is of great service in the prophylaxis of lithemia, gout, migraine and other similar states of suboxidation.

A Compend of Obstetrics.—Especially Adapted to the Use of Medical Students and Physicians. By Henry G. Landis, A.M., M.D.; Late Professor of Obstetrics and Diseases of Women in Starling Medical College. Revised and Edited by William H. Wells, M.D., Adjunct Professor of Obstetrics and Diseases of Infancy in the Philadelphia Polyclinic. Sixth Edition. Illustrated. Price, 80 cents. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. 1898.

The quiz-compend before us is a good epitome of obstetric art and science. The facts are clearly expressed and systematically arranged, and the teachings of the author and editor are quite up to date. The illustrations include forty-seven figures and three full-page plates.

Text Book of Histology, Including the Microscopic Technic.—By Dr. Philipp Stohr, Professor of Anatomy at the University of Wurzburg. Second American from Eighth German Edition, Translated by Dr. Emma L. Billstein, Director of the Laboratories of Histology and Embryology, Woman's Medical College of Pennsylvania. Edited, with additions, by Dr. Alfred Schaper, Demonstrator of Histology and Embryology, Harvard Medical School, Boston, Mass. Octavo; 424 pages. With 292 Illustrations. Price, \$3.00. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. 1898.

Dr. Stohr's classical work during the twelve years of its existence has passed through eight editions in German, and has been translated into English, French, Russian and Italian. The author shows a perfect familiarity with and command of his subject, and is

peculiarly succinct and graphic in his descriptions. The directions for general and special technic are so complete and simple that a student could easily follow them with good results even without the aid of the teacher. The chiefest excellence of the work, however, is in the high order and natural faithfulness of the illustrations. Histology has already become of equal importance to macroscopic anatomy in scientific medicine, and certainly no better text book than this has ever been printed.

Manual of Diseases of the Skin.—With an Analysis of Twenty Thousand Consecutive Cases and a Formulary. By L. Duncan Bulkley, A.M., M.D., Physician to the New York Skin and Cancer Hospital; Dermatologist to the Randall's Island Hospital; Consulting Physician to the New York Hospital for Ruptured and Crippled, and Manhattan Eye and Ear Hospital, etc. Fourth Edition, Revised and Enlarged. Twelvemo; 362 pages. Price, \$1.25. G. P. Putnam's Sons, New York and London. 1898.

This is a book by a busy clinician, the 20,000 cases mentioned having been observed by the author himself in private and hospital practice. Though Dr Bulkley is preeminently a specialist, and has already written several other volumes, on the skin and its diseases, yet he never fails to emphasize the importance of general medicine in relation to dermatology. The text is necessarily condensed, but nevertheless gives a clear mental picture of the salient features of each disease. Under treatment only the best remedies are mentioned, and particular stress is put upon diet and hygiene. A compendious formulary at the end of the book offers a good choice of prescriptions, with the use of each clearly specified. The double index for ordinary reference and for differential diagnosis respectively is an excellent idea.

Materia Medica, Pharmacy, Pharmacology and Therapeutics.—By W. Hale White, M.D., F.R.C.P., Physician to and Lecturer on Pharmacology and Therapeutics at Guy's Hospital, London; Examiner in Materia Medica to the University of London, and Late Examiner in Materia Medica to the Conjoint Board of England. Edited by Reynold W. Wilcox, M.A., M.D., LL.D., Professor of Medicine and Therapeutics at the New York Post-Graduate Medical School, and Attending Physician to the Post-Graduate Hospital. Fourth American Edition, Thoroughly Revised. Twelvemo; 704 pages. Price \$3.00. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. 1898.

This is an excellent manual for students particularly, being arranged systematically and showing, as well the present state of the science allows, the reasons for the administration of each certain drug. The subject is presented in a terse, rational and perspicuous

manner. Important considerations are distinguished by heavy-faced type. The very readable introductory section on pharmacology and therapeutics is valuable for discriminative therapeutics. The main body of the work is taken up with the three classified sections on inorganic, vegetable and animal materia medica. In the last mentioned division, in addition to seven other groups, organic extracts and antitoxins are weighed in the balance judicially. Two appendices contain a list of vegetable and animals drugs arranged according to their natural orders, and a third furnishes a list of Latin phrases commonly used in prescription writing. An admirable index offers a ready key to all the contents of the book.

Human Anatomy.—A Complete, Systematic Treatise by Various Authors, Including a special Section on Surgical and Topographical Anatomy. Edited by Henry Morris, M.A. and M.B., London, Senior Surgeon to the Middlesex Hospital; Examiner in Surgery in the University of London; Member of the Council, and Chairman of the Court of Examiners of the Royal College of Surgeons of England; Honorary Member of the Medical Society of the County of New York. Illustrated by 790 Woodcuts. Seventh Edition, Revised and Enlarged. Octavo; 1274 pages. Price, \$6.00. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. 1898.

This superb volume represents the literary labors of a dozen men eminent in anatomy and surgery. The subject of osteology is treated very clearly and systematically by J. Bland Sutton. The editor has for his special theme the all-important topic of joints. The name, derivation, origin, insertion, structure, nerve supply, action and relations of the muscles are lucidly described under a simple and rational arrangement, by J. N. C. Davies Colley. Blood vessels and lymphatics are discussed by William J. Walsham, author of the noted "Manual of Practical Surgery." The nervous system was discussed in the first edition with exceptional clearness by H. St. John Brooks. This section has been revised, according to the latest conceptions of neurology, by Arthur Robinson, and is particularly strong in localization. The eye is succinctly described by R. Marcus Gunn, and elucidated greatly by a large number of diagrams and anatomic sections. The tongue, nose, ear, heart, voice and respiration receive a due share of attention by Arthur Robinson and Arthur Hensman, the latter also giving a complete and practical account of the organs of digestion and their relations. The urinary and reproductive organs and the skin are described with special stress upon important mechanical relations by William Anderson. The extensive and explicit summary of surgical and topographical anatomy, by W. H. A. Jacobson, is of great value to physicians and surgeons for reference. The short, final section on vestigial and abnormal structures, by Arthur Robinson, is an interesting collection

of odds and ends. The most attractive feature of the work is the profuse and elegant illustrature. Most of the illustrations are original, copyrighted and have been engraved from drawings made by special artists. Over two hundred of the total 790 are printed in colors.

Manual of Ophthalmic Surgery and Medicine.—By Walter H. H. Jessop, M.A., M.B., Cantab, F.R.C.S. Eng.; Ophthalmic Surgeon to and Lecturer on Ophthalmic Medicine and Surgery at St. Bartholomew's Hospital; Consulting Ophthalmic Surgeon to the Paddington Green Children's Hospital. Twelvemo; 469 pages. Price, \$3.00. London: J. & A. Churchill. Philadelphia: P. Blakiston's Son & Co. 1898.

The author of this manual has succeeded in his endeavor to make it systematic, practical, concise, and at the same time comprehensive. The text is grouped in twenty-three chapters, with an appendix containing many approved formulae, general rules for operating and explanatory paragraphs on lenses, spectacles, shades, etc. The first three chapters are on the examination of the eye and its adnexa, being a simple, lucid and rational exposition of this essential subject. The anatomy, diseases, defects and deformities, tumors and injuries of the various parts of the eye are then taken up and considered chiefly from the clinical standpoint, with special attention to diagnosis and treatment. Affections of the ocular muscles and diplopia are elucidated by a number of easily comprehended diagrams. The measurement of errors of refraction and accommodation and the practical fitting of glasses are taught thoroughly, considering limitations of space. The final chapter on eye symptoms and diseases in general is a helpful and convenient summary of many salient facts. The book is illustrated with 110 woodcuts, four beautiful full-page colored ophthalmoscopic plates and Holmgren's color vision plate. It is to be recommended particularly to medical students and general practitioners.

A Text Book of Obstetrics.—By Barton Cook Hirst, M.D., Professor of Obstetrics in the University of Pennsylvania. Octavo; 846 pages. With 653 Illustrations. Philadelphia: W. B. Saunders, 925 Walnut Street, 1898. Price, Cloth \$5.00 net; Sheep or Half-Morocco, \$6.00 net.

This work is the result of a practice devoted for the past twelve years exclusively to obstetrics and gynecic surgery in private and in eight of the principal hospitals of Philadelphia. He is qualified, therefore, for writing such a treatise, both by clinical experience and by training as a medical teacher. The contents are in seven parts. In the first and largest part, pregnancy is discussed under the following chapter headings: Anatomy; menstruation, ovulation, fertilization; development of embryo and fetus; fetal appendages;

diseases of the fetus; physiology of pregnancy; and pathology of the pregnant woman. Part second is a practical account of the physiology and management of labor and the puerperal state. In the third part the mechanism of normal and abnormal labor is clearly portrayed in print and picture. The fourth part is on dystocia, the fifth on the pathology of the puerperium, the sixth on obstetric operations, and the seventh on the physiology and pathology of the new-born infant. The great number of illustrations that enrich and elucidate the text are chiefly from original photographs. In addition to the ordinary figures, there are eleven colored plates showing the breast and vaginal changes of pregnancy and other important phenomena as no mere words could do. The author and publisher have produced a work which deserves to rank among the classics on this subject.

A Handbook of Hygiene and Sanitary Science.—By George Wilson, M.A., M.D., LL.D., Edin., F.R.S. Edin., D.P.H. Camb.; Medical Officer of Health for the Mid-Warwickshire Combined District, etc. Eighth Edition. Twelvemo; 798 pages. Price, \$3.00. London: J. & A. Churchill. Philadelphia: P. Blakiston's Son & Co. 1898.

This compact volume contains a great amount of important information concerning preventive medicine. The twenty chapters which make up the text deal in order with the history of sanitary science, food and diet and the examination of foods; air and its impurities and their effects on public health; ventilation and warming; examination of air and ventilation; climate and meteorology in their relations to public health; water, as to sources, necessary quantity, modes of supply, sources of pollution, purification, etc., water analysis; impure water, and its effects on public health; removal of sewage and house refuse; purification and utilization of sewage; soils and localities—their influence on public health; dwellings and schools; hospitals; infectious and parasitic diseases, prevention and disinfection; disposal of the dead; vital statistics; sanitary law; sanitary officers and their duties. The appendix contains a number of useful tables and collections of data and memoranda. Technical subjects are suitably illustrated. The author is everywhere practical, sensible and conservative.

Acromegaly.—By Guy Hinsdale, A.M., M.D., Assistant Physician to the Orthopedic Hospital and Infirmary for Nervous Diseases, and to the Presbyterian Hospital in Philadelphia. William M. Warren, Publisher, Detroit. 1898.

To this essay, which is reprinted from *Medicine*, was awarded the Boylston prize of Harvard University for the year 1898. It is much the most complete and scientific brochure upon this curious disease. The text is handsomely illustrated with thirty-three photographs, and has appended a copious and explicit bibliography.

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The Medical News Pocket Formulary for 1899.—Containing sixteen hundred prescriptions representing the latest and most approved methods of administering remedial agents. By E. Quin Thornton, M.D., Demonstrator of Therapeutics, Pharmacy and Materia Medica in the Jefferson Medical College, Philadelphia. In one wallet-shaped volume, strongly bound in leather, with pocket and pencil. Price, \$1.50, net. Lea Brothers & Co., Publishers, Philadelphia and New York.

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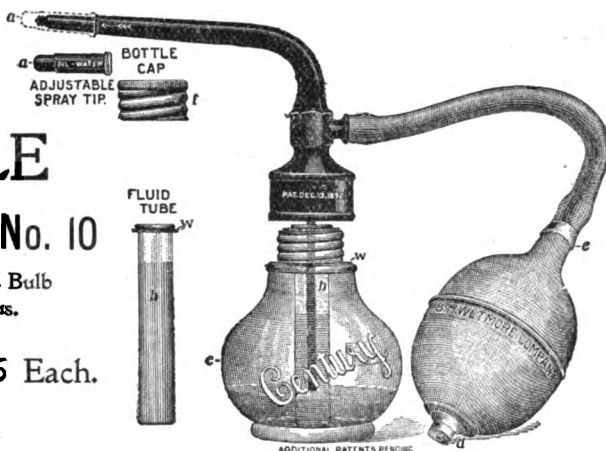
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Fig. XVII—Dorsal Position.

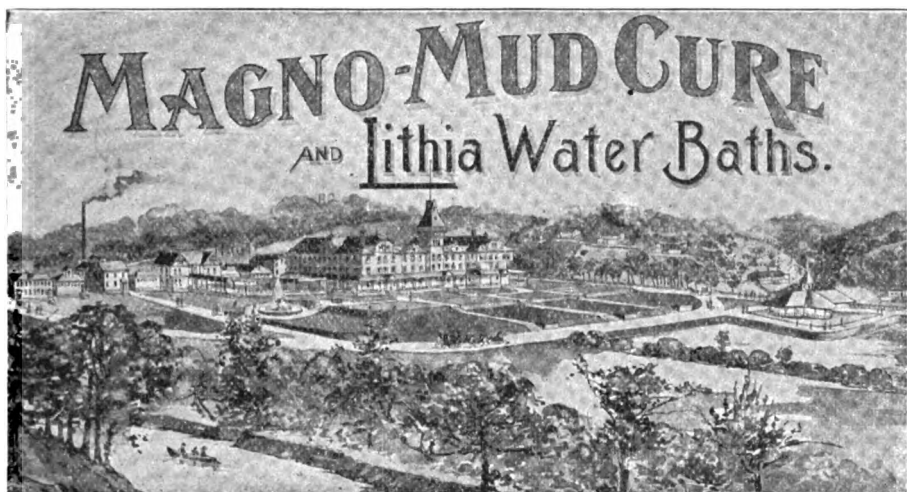
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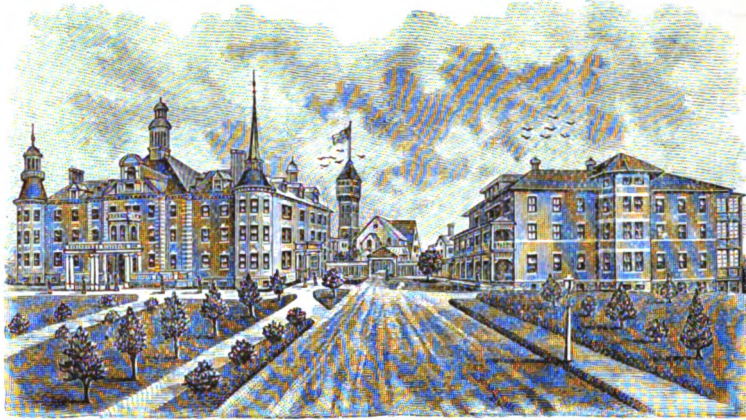
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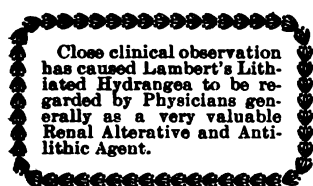
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Montgomery, M. D., of Chicago, Ills. His plan of treatment in acute inflammation of the prostate gland is to wash out the abscess cavity with hydrogen peroxid, give copious hot water enema and hot hip baths frequently, avoid morphine internally and advise care lest the patient strain at stool or during micturition. On the theory that toxins are retained in the circulation and within the gland and to prevent degeneration in the gland substance, he administers tritium repens or fluid extract tritipalm freely, combined with gum arabic or flaxseed infusion. Along with these remedies the mineral waters, particularly vichy with citrate of potash, go well together. Hydrate of chloral or this salt combined with antikamnia are the very best anodyne remedies to control pain and spasms of the neck of the bladder. These pharmacologic or medicinal remedies are the most logical to use in his judgment, while externally, applications of an inunction of 10 or 20 per cent iodoform, lanoline, as well as of mercury, are also of value.

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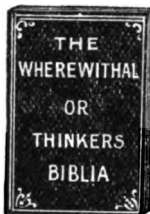
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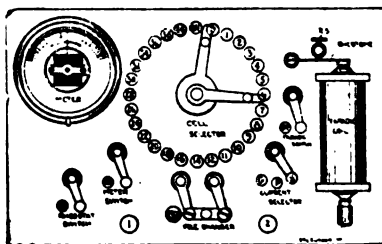
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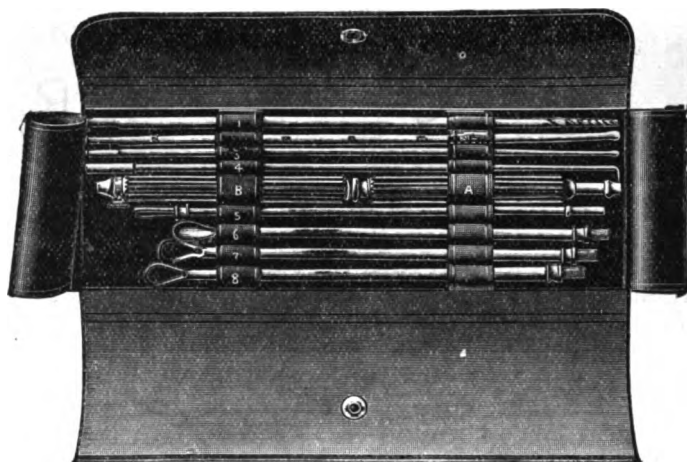
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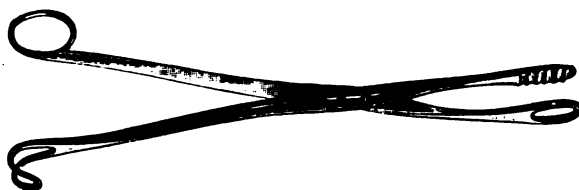
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Alvin Reed

President Wyoming State Medical Society.



E. STUVER, M. D.,

Secretary Wyoming State Medical Society.

DENVER MEDICAL TIMES

VOLUME XVIII.

FEBRUARY, 1899.

NUMBER 8.

ORIGINAL COMMUNICATIONS.

MINUTES of the SECOND REGULAR MEETING
OF THE
WYOMING STATE MEDICAL SOCIETY,
HELD AT
ROCK SPRINGS, WYO.,
November 1, 1898.

The second regular meeting convened in Rock Springs, November 1st, 1898. Met in the city hall at 10 o'clock a. m., and was called to order by the president, Dr. R. Harvey Reed.

The minutes of the last regular meeting were read and approved.

The mayor, Hon. W. K. Lee, delivered a felicitous address of welcome, and extended the hospitality of the city to the society.

The address of welcome was responded to by Dr. C. H. Solier, who thanked the citizens of Rock Springs for their courtesies and made a strong plea for the organization of the medical profession and a closer union of its members.

In the absence of Drs. J. C. Hammond and E. E. Levers the president appointed Drs. J. H. Maynard and J. W. Hawk to fill the vacancies on the executive committee. This committee then took up the applications for charter membership and the following were recommended for membership, and the report was unanimously approved by the society.

List of charter members: E. Stuyver, W. W. Crook, Charlotte G. Hawk, Jacob W. Hawk, R. Harvey Reed, W. C. C. Freeman, Ernest E. Levers, Robert C. Chamberlain, G. M. Russell, James Lane, Frank Dunham, C. H. Solier, James Carter, M. H. Verpoorten, H. M. Bennett, J. C. Hammond, R. W. Hale, John H. Lott, W. L. Johnson, John F. Leeper, George G. Verbryck, L. A. Gates, F. Horton, Allen F. Miller, Wm. A. Jolley, Arthur V. Stoughton, H. A. Abbott, J. B. Weaver, J. E. Osborne, H. J. Maynard.

At the afternoon session the following additional applications were approved, viz: George P. Johnson, E. P. Rauch.

Dr. J. W. Hawk, first vice president, was then called to the chair and the president, Dr. Reed, read his presidential address, "The Importance of Closer Scientific and Fraternal Relations."

It was moved by Dr. Solier, and duly seconded, that a vote of thanks be extended to Mayor Lee. Carried.

It was moved by Dr. Maynard, and seconded by Dr. Solier, that the application of Dr. A. E. White, together with his initiation fee, be returned to him. Carried.

Dr. Chamberlain then read his paper on "Foxtail Infection." In order to give the society an opportunity to see the case before discussing the paper, it was moved, duly seconded and carried that the discussion be postponed and that we proceed with the transaction of important business to come before the society.

A letter from Congressman John E. Osborne to the president, R. Harvey Reed, suggesting that the society adopt strong resolutions condemning the pending anti-vivisection bill (Senate Bill 1063); also favoring the reorganization of the United States Army Medical Department on an independent basis with a medical officer in the President's cabinet at its head, and pledging himself to use his influence in securing such desirable ends, was read and it was moved, duly seconded and unanimously carried that the president and secretary prepare suitable resolutions on these subjects. Accordingly the following resolutions were prepared and adopted by the society, viz.:

On the anti-vivisection question: Whereas, many of the great discoveries as to the causation, the prevention and the cure of diseases as well as the advancement of sanitary science and the greatly lowered death rate among civilized nations are largely due to experiments on living animals; and,

Whereas, the bill now pending in the United States Senate (Senate Bill 1063), or any similar legislation, if enacted into law will greatly obstruct and hamper scientific investigators in their work and tend to prevent life-saving discoveries in the future.

Be it therefore resolved, that we, the Wyoming State Medical Society, in regular session assembled, do hereby condemn Senate Bill 1063 and strongly protest against its passage and urge upon our representatives in Congress and the United States Senate, as well as all friends of progress, to use every honorable means to secure its defeat, and the defeat of any similar measure that may hereafter be introduced.

(Signed)

R. HARVEY REED,
E. STUVER,

Committee.

On a Department of Public Health:

Whereas, the progress and happiness of a nation are largely dependent on the health and physical integrity of its people; and,

Whereas, the protection of our country against the introduction of infectious and contagious diseases and the advancement of sanitary science can only be accomplished under the direction and control of sanitary experts:

Be it therefore resolved, that we, the Wyoming State Medical Society, in regular session assembled, do hereby recommend the establishment of a public health department under the direction and control of a medical expert, who shall be a member of the President's cabinet.

And the following resolutions condemning the Behring patent on diphtheria antitoxin were then unanimously adopted, viz.:

Whereas, prevailing conditions of patent and trade-mark laws enable any one to secure proprietary rights to chemical compositions associated with or without trade-marks, thereby inflicting an injustice upon the American people; and,

Whereas, under our lax laws Professor Emil Behring and his agents have secured a patent on diphtheria antitoxin:

Resolved, that the State Medical Society of Wyoming expresses its unqualified condemnation of the course pursued by Professor Emil Behring and the Farbwerke of Hoechst-on-the-Main, Germany, in securing a United States patent on diphtheria antitoxin, and that this society regards such action as a violation of professional ethics, as an injustice to the medical profession, and as an imposition upon the American public.

Resolved, that this society earnestly reprobates the prevailing laxity in our patent laws, which bestow upon foreigners special privileges, concessions and monopolies that they cannot secure in their native lands.

Resolved, that while it is the duty of our government to encourage invention, it is eminently unjust and contrary to public policy to grant perpetual property in a trade-mark name and to accord patents on the chemical composition of medicinal substances, thus preventing their manufacture by other processes or their sale under different names.

Resolved, that copies of these resolutions be transmitted to the members of the commission appointed by President McKinley for the revision of the United States patent and trade-mark laws, namely, Mr. Francis Forbes of New York city, Hon. Arthur P. Greeley, assistant commissioner of patents, Washington, D. C., and Hon. Peter Grosscup, Chicago, Illinois.

Resolved, that we commend the action of the American manufacturers of antitoxin who have agreed to protect the profession in the use of their serum, and recommend the use of the American product in preference to Behring's.

AFTERNOON SESSION.

The report of the delegates to the American Medical Association meeting in Denver last June was then called for. No written report was presented but Drs. Stuver and Reed reported that our society had been duly recognized by the American Medical Association, with which organization we are now in affiliation. They also reported that Wyoming's full delegation presented

papers to and took part in the discussions before a number of the sections.

The society then proceeded to the election of officers and the following were unanimously chosen, viz.:

President, R. Harvey Reed, Rock Springs; First Vice President, H. J. Maynard, Cheyenne; Second Vice President, George G. Verbryck, Cambria; Third Vice President, E. E. Levers, Almy; Secretary and Editor, E. Stuver, Rawlins. For Treasurer, Drs. C. H. Solier of Evanston and J. F. Leeper of Casper were placed in nomination, and a ballot being taken, Dr. Solier received six votes and Dr. Leeper two votes, whereupon Dr. Solier was declared elected Treasurer for the ensuing year.

The following committees were then elected, viz.:

Executive Committee—R. Harvey Reed, *ex officio*; C. H. Solier, 1899; George P. Johnson, 1900.

Admission and Medical Societies—J. W. Hawk, James Carter, Frank Dunham.

Legislature—R. Harvey Reed, C. H. Solier, George G. Verbryck.

Ethics—James Carter, Allen F. Miller, J. F. Leeper.

Necrology—F. Horton, J. C. Hammond, W. C. Freeman.

The following delegates and alternates to the American Medical Association meeting to be held in Columbus, Ohio, next June were then unanimously elected, viz.:

Delegates—R. Harvey Reed, E. Stuver, H. J. Maynard; and the secretary was empowered to select the fourth delegate:

Alternate—W. C. C. Freeman;

and the secretary was empowered to select three alternates, to fill the vacancies.

It was moved by Dr. Solier, duly seconded and unanimously carried that Laramie City be selected as the next place of meeting.

It was moved, seconded and unanimously carried that the next meeting convene on the second Tuesday of October, 1899.

It was moved, seconded and carried that the society next year hold a two days' session, beginning at 2 o'clock the first day. The society then proceeded with the reading of papers.

"Autointoxication" was read by E. Stuver and discussed by Drs. Maynard, Charlotte Hawk and Solier and the discussion closed by Stuver.

Dr. Chamberlain's paper was then discussed by Drs. Solier, Reed, Maynard and Chamberlain.

Dr. Solier next read his paper on "The Prophylaxis of Puerperal Infection." The paper elicited an interesting discussion, which was participated in by Drs. Freeman, Charlotte Hawk, Stuver and Reed.

As the time for adjournment was approaching, it was moved by Dr. Maynard, duly seconded and carried, that the papers of Drs. Russell, Levers, Leeper, Jolley and Betts be read by title and referred for publication.

It was moved, seconded and after some discussion carried, that the fees for the ensuing year be fixed at \$1.

It was moved, seconded and carried that the Program and Printing Committee (president, secretary and treasurer) are hereby instructed to make the most favorable arrangements for the publication of the transactions of the society.

It was moved, seconded and unanimously carried that a vote of thanks be extended to Dr. H. W. Coe for courtesies shown towards the society in printing the transactions of our last meeting.

It was moved, seconded and unanimously carried that Drs. Maynard, Solier and Jacob Hawk be elected a committee to prepare a vote of thanks to the citizens of Rock Springs for their hospitality.

The following resolutions were presented and unanimously adopted by the society, viz.:

We, the undersigned committee on resolutions appointed at a meeting of the Wyoming State Medical Society, do hereby express our thanks to the authorities and citizens of Rock Springs for the kind, generous and whole-souled reception and entertainment given us on the occasion of our annual meeting.

(Signed)

H. J. MAYNARD.
C. H. SOLIER.
J. W. HAWK.

It was moved by Dr. Solier and seconded by Dr. Maynard that a vote of thanks be extended to the officers of the society for the efficient manner in which they have performed their duties. Unanimously carried.

No other business appearing, the society then adjourned to meet in Laramie City the second Tuesday in October, 1899.

Between the sessions the members of the society were taken to the Wyoming State Hospital, where they had the pleasure of seeing many interesting cases which are being excellently cared for under the able management of Dr. Reed, with the assistance of Drs. Chamberlain and Ranch and a corps of trained nurses.

From the hospital the members of the society were taken to the Commercial hotel, where they were royally entertained at lunch by Dr. W. C. C. Freeman.

In the evening Dr. Reed and his amiable wife gave an elegant reception at their home in honor of the occasion. Here we had the pleasure of meeting a large number of the very best

people of Rock Springs, and it is needless to say that the affair was a most enjoyable one and highly appreciated by every one present.

After the reception a grand ball was given in the Opera House in honor of the society. A large and brilliant company was present, care was thrown to the winds and enjoyment was the watchword of the hour.

Thus ended a most successful and enjoyable meeting, one which will ever remain a red letter day of the Wyoming State Medical Society.

E. STUVER, Secretary.

THE IMPORTANCE OF CLOSER SCIENTIFIC AND FRATERNAL RELATIONS.

President's Address, Delivered before the Second Meeting of the Wyoming State Medical Society, Held at Rock Springs, Wyo.,
November 1, 1898.

By R. HARVEY REED, M.D.,

Superintendent and Surgeon-in-Charge, Wyoming General Hospital; Member American Medical Association, American Academy of Railway Surgeons; Rocky Mountain Inter-State Medical Association; The Western Surgical and Gynecological Association, Etc.

Rock Springs, Wyoming.

For ages medicine has been lauded by fiction and song as the noblest of all professions, and yet it is a lamentable fact that its members are the object of ridicule, largely by those who know the least about them on the one hand, and on the other by those who know the most about them. Paradoxical as it may seem, we regret it is true, and while the attorney contests the right of his client to the bitter end, before the bar, the moment his case is closed he is a bosom friend of his antagonist, and clasps him with the right hand of fellowship and opens his heart to him in the hour of distress.

The ministry has its dissensions on questions of orthodoxy, and while they disagree as to the beliefs and teachings of the Holy Writ, yet, as a profession at large, they stand together for one cause regardless of their friends or foes. Why is it that the physician and surgeon is made the object of ridicule, not only by the public but by the press, and the oft-repeated adage by Pope, "Who shall decide when doctors disagree?" is quoted to their discredit and disgrace.

In studying the history of medicine we learn that it has come down from the days of Galen and Esculapius, and at that

time books and literature of all kinds in reference to medicine was practically unknown, and the student of medicine was obliged to learn from his master, and his master in turn was obliged to learn from experience, which was confined to his own circle of observation, and as a consequence it begot narrow-mindedness and lacked the broad expanse which the student of to-day has the pleasure of enjoying. Each of the great masters thought that he, and he only, was right, and the followers of each likewise lauded the one and scorned the other. This condition of affairs is most lucidly set forth by the poet in the oft-repeated couplet:

"A little learning is a dangerous thing,
Drink deep, or taste not the Pierian spring."

Gradually, however, the medical profession has steadily evolved from this chaotic condition of empiricism into a broad expansive field of scientific advancement. Instead of a two years' course of six months each, which was given the tyro who was taken from his humble field of labor, without a reasonable foundation of a generous education, we have now a four years' course of nine months each in all the best medical colleges of the land, and instead of the old classical seven branches of anatomy, physiology, chemistry, materia medica, obsterics, surgery and medicine, we have the number of studies more than quadrupled. The student of to-day must delve into the mystery of bacteriology, seeking the cause of the disease produced by numerous vegetable organisms that cause typhoid fever, diphtheria, yellow fever and a score of other diseases that are well known to those who are versed in the science of modern medicine. Nay, he can not stop there; he must proceed to search through the distorted cells, the result of disease, and learn from their pathological conditions how the various parts of the human economy produce certain symptoms and their inevitable results. He must familiarize himself with embryology as well as obsterics. He must study physiological chemistry as well as the chemistry of the inorganic and organic world. He must delve into the mysteries of histology and not content himself with the mere symptoms that present themselves at the bedside.

The abdominal cavity is the common field for the gynecologist and the general surgeon, who, instead of allowing his patient to die from benign tumors or obstruction of the intestinal tract, have no hesitancy in opening this once sacred cavity and removing the pathological conditions, and in the last few years they have not only practically reduced it to a science, but have saved thousands of lives and ameliorated the sufferings of humanity beyond human comprehension.

This being the fact, it is high time that they should cast aside these petty jealousies that arise principally from ignorance, and close their eyes to these ignoble dissensions, and seek a closer scientific and fraternal relation. It lies with them to eradicate this evil and instead of being the object of ridicule, they have within themselves the power to unite and stand firm against any other profession in the civilized world. Yea, they have learned this by the incessant burning of the midnight oil, by the never-ending investigation, by the discoveries of such men as Koch, Pasteur and Esmarch of the old world, and Rush, McDowell, Gross, Morton, Agnew and Senn of the new world, who, with many others, have immortalized themselves in their ardent, self-denying, conscientious study for the advancement of scientific medicine, and who have made it possible for you and me to adopt for ourselves the lines of Adams, who said:

Fifty years of strong progression!
Half a century of rise!
Noblest in a great profession,
Highest far, by all confession,
But gentle as thy name implies.

In the midst of Time's swift eddy,
Fraught with wrecks of human life;
Thy figure stands out strong and steady,
For thy duty calm and ready,
Never blinded by the strife.

In the language of the Pacific Medical and Surgical Journal, "At no moment in the world's history was so much mental power directed in the channel of medical study; never were there so many giant intellects laboring to advance the various departments of medical science."

It is an easy matter for us to find excuses for not attending medical societies. It is an easy matter for us to find excuses not to meet our brothers in consultation, but it is just as easy to reverse this order, and be willing and ready, nay, anxious for both, for he who shuts himself up in his own little circle, and excludes himself from the associations of his fellow practitioners, denies himself the pleasure of the advancement obtained by the attending of medical societies, numerous as they may be, digs for himself his own grave in which he will be buried by an avalanche of his own bigotries. It is true there are exceptions to these general principles, and some of our best men are in such circumstances as to make it impossible for them to attend the scientific and social functions of our medical societies. But these are exceptions to the rule, and it is said that exceptions to the rule only prove its truth.

The science of medicine should recognize no geographical bounds. It should

"Seize upon truth where'er 'tis found,
Among your friends, among your foes,
On Christian or on heathen ground:
The flower's divine where'er it grows."

We realize in the newer states of the Union and in the so-called "Wild and Woolly West," where the members of the profession of necessity are widely separated from each other, that it is impossible for them to enjoy the daily intercourse which is afforded the members of the medical profession in the crowded states of the East, but this very fact has made the members of the profession in the West independent instead of dependent, as they are found in the East, notwithstanding it considers itself the Nestor of medical education, for here they are compelled to depend upon themselves and only in extreme circumstances are they able to call in counsel or mingle with the fellow members of the profession and consult over important cases, whereas in the East, where the profession is overcrowded, the student looks to his professor the moment he encounters a hard case, and depends upon him to bear the burden and responsibility, while he himself becomes a menial slave to dependency instead of independency.

Dr. Norcom, in an address before the Medical Department of the University of Pennsylvania on March 4, 1878, said:

"Think for yourselves and cultivate self-reliance. Your patients will not have confidence in you unless you show them that you have it in yourselves, which you cannot do unless you possess the knowledge their cases require. Be truth-lovers and you will be truth-seekers. In this way only can you avoid the influences to which we are all more or less exposed."

The fact that circumstances have excluded to a certain extent professional intercourse makes it all the more important and enjoyable when we have an opportunity to meet and consult with each other over those matters which are of common interest to our profession. It has been my observation that owing to the attenuated condition of the medical profession in many parts of the West it has kept up to the times by taking the best medical journals published, and the progressive members of the profession are all supplied with the latest publications from our best authors. Yet it is to be regretted that there are still some who fail to realize the importance of closer scientific and fraternal relations, and, like Lucifer, live, "Never to hope again."

Again there is another class of our profession who avoid so far as possible a consultation with a brother practitioner, or

when they do they feel that it is either their duty to disagree with him or live in mortal fear that he will disagree with them. This is a mistake and tends to the depreciation of the medical profession.

My fellow-members of the Wyoming State Medical Society, permit me to admonish you never to refuse a consultation. It gives you strength and standing before the laity, and every consultation should be in the interest of the patient; every true member of the medical profession should be above anything that smacks of selfishness. Consultations should be purely scientific, investigating the facts, and then as judge of the court, arrive at a decision, based on the testimony before you, and do not fear each other, for if you are up in your profession, as a rule, you cannot but arrive at the same conclusion in the more common forms of disease, while on the other hand, in that class of cases which is deceptive to the best you cannot be criticised justly for having a different opinion from that of your fellow practitioner, and if you have it is no disgrace to you, but it should stimulate you to higher and greater efforts in the study of your noble profession. Remember the words,

"Our doubts are traitors,
And make us lose the good we oft might win
By fearing to attempt."

Never take a different opinion to heart, but always bear in mind that the same symptoms in doubtful cases may lead you to have one opinion while your brother practitioner may be just as honest as you in having another. This, however, should never be allowed to cause enemies, for it is this very fact that depreciates you in the eyes of the public, which never stops to think that there is no end to the advancement of the medical and surgical sciences, and notwithstanding it has made greater progress during the last fifty years than any other science known to the world, it is still not infallible, and for this reason it is our duty to ourselves and our patrons to continue to burn the midnight oil and never give up our task until life shall cease to exist. In this way, and only this way, can the importance of closer scientific and fraternal relations be thoroughly appreciated. We must remember that

"The world's a room of sickness, where each heart
Knows its own anguish and unrest,
The truest wisdom, then, and noblest art,
Is his who skills of comfort best;
Whom by the softest step and gentlest tone
Enfeebled spirits own,
And love to raise the languid eye
When, like an angel's wing, they feel him flitting by."

Notwithstanding the state of Wyoming has medical laws that are in many respects better than those of some of its sister states, yet this is no reason why it should not take advantage of the best, and by so doing encourage closer scientific and fraternal relations, by amending our laws so that hereafter no one shall be admitted to practice medicine or surgery in any form in this great state without having graduated at a reputable medical college recognized by the Association of Medical Colleges of the United States or the National Confederation of State Medical Examining and Licensing Boards. Yes, further I would recommend the passing of a law creating a State Board of Health, which shall be vested not only with the power of examining into the qualifications of every physician or surgeon who shall knock at our door for admission to the medical profession of this state, but at the same time have under their care the sanitary and hygienic condition of its citizens. On this question I can speak from experience, for notwithstanding my native state is one of the leading states in the Union from a commercial and political standpoint, yet it was only within the last few years that the medical profession of Ohio were granted laws which looked to the advancement of the medical and surgical sciences, and consequent protection of the citizens of that great commonwealth from the intrigue of charlatans and quacks. Truly are delays dangerous in this connection, for as state after state in the Union passed laws compelling the medical profession to be proficient in their calling, the scums of these states naturally flocked to other states where there was no barrier against their quackery, where they were at perfect liberty to practice their nefarious schemes at the expense of the public. Hence I repeat it that it is important that this state should be abreast with the other states and have the best medical laws in the land that will protect it and its citizens from the schemes of the ignoramus, who only use the cloak of the medical profession as a means of gain and cares nothing for its scientific and fraternal relations.

Before closing I beg your indulgence in calling attention to the importance of the medical profession of this state in standing as one solid phalanx against the passage of a bill now pending in the Senate of the United States with a view of prohibiting vivisection, for I am sure it is not necessary for me to state to you that were it not for legitimate vivisection the United States of America, which has recently shown itself to be one of the greatest powers of the earth, would not stand as it does to-day, the leader in medicine and surgery.

We, as members of the medical profession, and our patients who patronize us and expect from us the best the world can af-

ford, cannot tolerate the passage of any law that will take from us any possibility for the lessening of pain and the prolongation of life. Then, fellow-members, let us resolve ourselves into a committee of one and make it a point, regardless of political or religious relations, to make a personal appeal to our members of Congress and our United States senators against the passage of this nefarious law.

In closing I wish to thank the members of this, the youngest state medical society of this great country, for the honor they have conferred upon me by electing me their first president, and trust each one of you will remember, as we separate for our daily avocations, that

“Above all price of wealth
The body’s jewel—not for minds profane,
Or hands, to tamper with in practice vain—
Like to a woman’s virtue is man’s health.

A heavenly gift within a holy shrine!
To be approached and touched with serious fear,
By hands made pure, and hearts of faith severe,
Ev’n as the priesthood of the One divine!”

AUTO-INTOXICATION.*

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Weber defines auto-intoxication as a poisoning of the system by the products of its tissue metamorphosis; they may be normal products and do harm by excessive accumulation or may be abnormal, pathological, viz., either not at all or in minute particles only present in the healthy body. (*Charlotte Medical Journal*, Nov., 1897, p. 580.)

During the early period of the germ theory of disease, the germs themselves were regarded as the maleficent agents and the active causative factors in the production of disease processes. Later on it was contended by many eminent authorities that it was not the germs themselves but the toxic materials or toxins which they generated that caused the trouble, and within still more recent years the theory that the body without the in-

* Read at the second regular meeting of the Wyoming State Medical Society, held at Rock Springs, Wyo., November 1, 1898.

troduction of any external disease-producing germs or toxic materials, can, by a retrograde metamorphosis of its own tissues, produce virulent poisons which may and frequently do lead to serious derangements and even cause death.

It has been clearly demonstrated that intense muscular activity is followed by the formation of organic poisons. This poisoning is, other things being equal, in direct ratio to the intensity of the effort and the amount of muscular tissue involved. Fernand Lagrange, in his work, *Physiology of Bodily Exercise*, page 348, says: "In the opinion of all physicians in these days the fevers of overwork, which are observed alike in animals and in men, are due to a kind of poisoning of the body by its own elements, to an auto-intoxication of the system by the products of dissimilation which have accumulated in too great abundance in consequence of excessive work."

Michael Foster, the great physiologist, in a lecture before the University of Cambridge, a few years ago spoke as follows: "When we have excessive muscular exertion, the weariness may take a form of distress, and if the effort be continued the distress may become so great as to occasion such complete exhaustion that even death may result. In excessive work, of whatever kind it may be, in order for the work to be accomplished there is a greater demand upon the blood for oxygen. There are many things beside carbonic acid which are swept into the blood as the result of the activities of the body; in other words, the product of work in the human body is a poison which must needs be eliminated through the medium of the lungs and the other excretory organs. As physical and mental efforts are continued the eliminating capacity, unless carefully guarded, is marred, the resulting poisons are more and more heaped up in the system, poison the muscles, poison the brain, poison the heart, poison at last the blood itself, starting in the intricate machinery of the body new poisons in addition to themselves. The hunted hare run to earth dies not because his heart stands still, its store of energy having given out, but because the poisoned blood poisons his brain, poisons his whole body."

In view of these facts as to the formation of toxic materials by strong muscular activity, I have long been convinced in my own mind that many cases of mild poisoning following parturition in which every possible precaution has been taken to avoid external infection, are caused by the long continued uterine action, which, if intense and tonic, in all probability generates toxic materials much more rapidly than they can be eliminated, especially if this action has been rendered more tonic, intense and continuous by the administration of ergot during labor.

In a paper, "Should Ergot Be Used During Parturition and the Subsequent Involution Period," read before the Colorado State Medical Society in 1894, and published in the *Journal of the American Medical Association* September 15, 1894, I called attention to this subject, and I now desire to emphasize the position then taken and to insist on the importance of keeping all the excretory functions of the pregnant and parturient woman in first-class working order. Furthermore, my experience has convinced me that a few small doses of calomel, in conjunction with acetate of potassium and sweet spirits of nitre, to each dose of which a couple minims of tincture of aconite root is added, if the latter be indicated, administered every two hours for a day or two, will arouse the excretory organs and poison-destroying powers of the system and do more to relieve the threatening symptoms than all the quinine and coal tar derivatives that can be given to such cases.

In the preface to his translation of Bouchard's work, Dr. Oliver speaks as follows: "Bouchard, in his *Auton-Intoxication*, clearly indicates to us that man is constantly standing, as it were, on the brink of a precipice; he is continually on the threshold of disease. Every moment of his life he runs the risk of being overpowered by poisons generated within his system. Self-poisoning is only prevented by the activity of his excretory organs, chiefly the kidney, and by the watchfulness of the liver, which acts the part of a sentinel to the materials brought to it by the portal vein from the alimentary canal," and continuing, he says: "The part played by auto-intoxication in mental disease is attracting attention. In the *Medical Week*, August 11, 1893, there is a lengthy report upon the subject as discussed at the French Congress of Psychological Medicine by Drs. Regis, Chevalier-Lavaure and others. It has long been known that the various fluids of the body undergo modifications in the insane. Recent investigation has shown that the urine is much less toxic than normal in cases of mania, while the lethal action of this fluid is increased in melancholia. Maniacal urine gives rise to excitement and convulsions, when injected into an animal, while the injection of urine from a case of melancholia is followed by a depression of spirits, restlessness and stupor—a proof that auto-intoxication is the cause and not the effect of the mental condition.

I believe that every observing physician could bear witness to the fact that many cases of depression of spirits, mental hebetude and general pessimism are due, not to some incipient serious organic disease, as the patent medicine manufacturer or the blatant advertising charlatan would have the sufferers believe, but are merely the result of the accumulated retrograde

toxic products, produced by the normal activities of their bodies, but which, instead of being promptly eliminated, accumulate in the blood and poison the nervous centers, set up disorders of the digestive organs, overtax the liver and lead to almost innumerable functional derangements. I had an excellent illustration of this sort of trouble in the case of a prominent county official that I treated a short time ago. He came to me with a severe, dull, heavy headache and a sense of weight and oppression at the base of the brain; mental hebetude, defective memory; tongue foul and quite heavily coated; bowels constipated and digestion impaired. This condition had existed for a month or two and he had been treated by another physician, who gave him several different prescriptions, but instead of improving he was constantly getting worse. I regarded the case as one of auto-intoxication and gave him small doses of calomel and sodium bicarbonate until the bowels acted freely; and the following prescription, viz.:

R̄ Sodii Salicylatis,	24.00
F. E. Cascarae Sagradae,	12.00
Aquae,	30.00
Syrupi Haematici Comp. (P. D. & Co.'s) q. s. ad. 180.	
M. Sig: Teaspoonful three times a day.	

He almost immediately felt greatly relieved and in a few days the disagreeable symptoms had entirely disappeared.

Bouchard, in his classical work on "Auto-Intoxication," has clearly demonstrated that normal urine—that is, urine taken from healthy persons—when injected into animals produces toxic symptoms, and if sufficient be used causes death. From a careful study of a large number of experiments on animals he arrives at the conclusion that the urine contains substances which produce the following effects, viz.:

First—A diuretic substance, which is urea.

Second—A narcotic or truly toxic substance to which a name has not yet been assigned.

Third—A sialogenous substance, or one which produces salivation or an increased flow of saliva.

Fourth—A convulsive substance, fixed, stable, organic, insoluble in alcohol; it might belong to the group of coloring substances from the manner in which it behaves; it is really an alkaloid, since it is insoluble in alcohol either in the form of a salt or a base. Name not determined.

Fifth—A substance which produces contraction of the pupil; fixed, organic, possibly a coloring substance; probably not an alkaloid.

Sixth—A heat-reducing substance which lowers the temperature by reducing heat production.

Seventh—Another convulsive substance, fixed, inorganic, in short, potassium, whose toxic and convulsive properties have long been known. (Auto-Intoxication, pp. 60-65.)

Time will not permit me to enter into the details of this extremely fascinating subject, but *en passant* I desire to report a case of auto-intoxication from retention of urine.

On April 22, 1898, I was called to see a case sixty-five miles north of Rawlins and found the following condition: The woman had been confined with her second child about six days before; the placenta was retained. This was removed and the uterus curetted and washed out by Dr. Calloway of Lander, Wyoming, about three days after the birth of the child.

I found the woman at 8 o'clock p. m. in great distress, pulse about 120, temperature 104 degrees F.; tongue coated and foul; bad taste in mouth; no appetite; bowels somewhat constipated and the whole body was covered by a dark purplish eruption very much like that of measles; face, hands and feet greatly swollen. There was no pain nor tenderness of uterus nor abdominal distension; discharge from uterus about normal in quantity and free from offensive odor. She had not passed any urine for over seventy-two hours, and I drew off seventy-two ounces of highly-colored urine, which afforded great relief. I at once began to administer diuretic and eliminant remedies and the pulse and temperature almost immediately began to fall so that on the following morning they were nearly normal. This treatment resulted in a prompt recovery, but the husband reported to me later on that there was an extensive exfoliation of the epidermis which came away in great scales, some several inches long.

It is gradually beginning to be more clearly understood that not only are diseases directly connected with the digestive and urinary organs caused by auto-intoxication, but likewise disorders of distant and special organs are due to the same cause. In the Journal of the American Medical Association, October 1, 1898, p. 772, is published a paper by Dr. H. B. Young on "Amblyopia from Auto-Intoxication," in which, after eliminating other causative factors, the author very conclusively shows that in all probability they were due to this cause. This paper (read at the Denver meeting of the A. M. A.) elicited an expression of opinion on the part of a number of eminent medical gentlemen, who corroborated the views expressed by the author. Dr. Casey Wood of Chicago spoke as follows: "I have been especially interested in Dr. Young's paper because I believe that I have obtained ample evidence of the auto-intoxication theory of amblyopia. Another matter to consider in connection with this paper is that form of atrophy of the optic nerve that Uthoff placed among the unknown

causes. I have for several years held the belief that these cases were in some instances, at least, due to auto-intoxication," and Dr. Dudley S. Reynolds said: "I have every reason to believe that there are many cases of amblyopia due to auto-intoxication. That view has been forced on me by experience. The inhibitory effect of alcohol on the eliminating organs affords at least reasonable grounds to suspect that a part of the results of amblyopia formerly attributed to alcohol are really due to auto-intoxication, because similar conditions are found in people with disturbed nutrition who do not use alcohol."

Dr. Jonathan Hutchinson (Archives of Surgery, July, 1898), writing about the infective materials generated in the act of inflammation, speaks as follows: "Whilst there can be little doubt that the introduction at the time of the injury of some living germ matter (bacillus) developed in connection with the process of inflammation in the contributor very greatly adds to the risk and gives character to the inflammation induced, there are good reasons for doubting whether any such material is essential. It is highly probable that in some instances a chemical product of decomposition may take its place, and further that in some cases no poison of any kind has been introduced. In the latter group we have to suppose that the tissues of the person wounded are capable of generating as the result of merely mechanical irritation a poison which shall prove infective. We have to accept the proposition—in all probability a truth—that the inflammatory process, however initiated, is always attended by the production of a virus (living or chemical, or both). Inflammation in its early stages always leads to multiplication of modified cell organisms which may be infective; in its later stages it leads to death of cells and may favor the access to the blood of chemical elements, the result of decomposition which may prove very injurious." (Charlotte Medical Journal, September, 1898, p. 320.)

While not relaxing one iota of our care and vigilance to prevent the introduction of external infective materials (indeed, I believe every possible precaution should be taken to prevent such an undesirable contingency), yet at the same time I believe the facts to which I have called attention above should give us a more comprehensive view of the causes of diseases and increase our vigilance in preventing them and enlarge our power of combatting them when existent.

While such a course should not make us less eager in our search for the specific bacilli, bacteria et id omne genus and their toxins, which cause many diseases, it should at the same time enlarge our mental horizon and impress upon our minds the fact

that our whole duty is not comprised in identifying the germ and discovering a germicide to destroy it, but that the afflicted individual should at the same time receive our most serious and earnest consideration. We should strive to secure the elimination of the peccant materials by keeping the excretory organs in good working order and by strengthening the cells and tissues in their fight against their destroyers.

As the individual is the social and economic unit of a nation, and as the strength and resisting power of a nation depends on the health and integrity of its individuals, so the cell is the individual element of the organism and on its strength and unimpaired functional activity depend the health and possibly even the existence of the body.

As money is the circulating medium of a nation, which enables its individuals to exchange their products, satisfy their wants and gratify their aspirations and ambitions, and as the prompt performance of these necessary functions depend on its free and unimpaired circulation among the individuals comprising the nation, so the blood is the great circulating medium of the body and on the proper performance of its functions depend the health, integrity and functional activity of every cell and tissue of which this body is composed.

In a normal, healthy condition a never-ending interchange is going on between the component cells of the body and the blood. If this interchange is free and unimpeded the blood constantly conveys to every cell and tissue the nutrient material necessary for their growth, the preservation of their integrity and their proper functional activity, and receives from these cells their retrograde toxic products and conveys them to the excretory organs, which, if they are in proper working order, promptly discharge them from the body.

When the truth is once thoroughly understood and appreciated that anything which interferes with the functional activity of the excretory organs and prevents the free elimination of poisons not only causes the blood to become loaded with toxic materials and thus renders it less able to take up the retrograde products of cell activity than when it contains a comparatively small amount of these materials, but that the poisoned blood less readily conveys the nutrient material which is absolutely necessary for the life and health of the cells, and that the accumulating poisons inhibit their activity and lessen their power to recognize and combat maleficent agents, when I say we once fully appreciate the importance of these truths and realize to how great an extent the welfare of the body depends on the consentaneous activity of the cells, the blood and the excretory organs, we will be able to appreciate the importance of auto-intoxication as an active factor in the production of diseases.

SUPPURATIVE DISEASES OF THE ACCESSORY SINUSES OF THE NOSE.*

By WM. WINTHROP BETTS, M.D.,
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While a great deal has been written on the subject of suppurative inflammation of accessory sinuses of late, it is a subject that can hardly be said to be exhausted. It is one of great importance, and is equally interesting to the general practitioner and rhinologist. A chronic purulent discharge from the nares, associated with little or no fotor perceptible to the attendant, with a history of nasal polypi, an acute "head cold," hypertrophic nasal catarrh, or perhaps of alveolar abscess at a period more or less remote, has, comparatively speaking, only recently and with the development of the study of rhinology, been of any special significance to the surgeon.

With the evolution of the specialist, however, and classification of diseases of special organs on a more scientific basis, was soon followed by a clearer comprehension of the nature of morbid conditions of which such a discharge is the evidence, and in many instances the only evidence at the command of the physician.

Treatises on general surgery, as found in our libraries, contain very little that is of practical value upon the subject, and even those more recent and exhaustive works upon rhinology which have appeared within the last decade, give comparatively little space to the discussion of the aetiology, pathology and treatment of a morbid condition, the importance, the consequences and the extreme obstinacy of which can only be estimated by those who, like myself, have often seen their best efforts vainly directed, and that with perfect cognizance of the existing condition.

That empyema of these sinuses is not an infrequent complication I am assured, as well from the number I have myself seen as from the reports of others, and yet I am convinced that it is less often recognized and correctly differentiated than any other disease of the nasal tract.

AETIOLOGY AND PATHOLOGY.

Many are of the opinion that the most frequent cause of this disease is the extension of the inflammatory process from the

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nose into the cavities. While Bosworth and others dissent from this view, believing that the diseases rarely result from an extension of the inflammation through the continuity of tissue, but is due rather to a catarrhal inflammation of the mucous membrane of the sinuses, brought about by a closure of the nasal opening, Baerhav's researches show that in the normal condition the sinuses contain a bland, inodorous, gelatinous, colorless fluid; that this secretion keeps the walls moist, but does not accumulate in the cavities, it being partially absorbed and possibly partly evaporated by the passing air current, but should causes operate to close the orifice, the external air could not penetrate into it, nor could the air already in the cavity escape from it. In this case the vascular system would act as a medium for gradual absorption of the confined air, which would necessarily be replaced in the sinus by secretion. But as this secretion could not be absorbed as rapidly as exuded, the air yet remaining in the cavity of the sinus would decompose the accumulated mucus, thereby causing irritation and disease of the mucous membrane, and which eventually degenerates into one characterized by a purulent discharge. In this manner hypertrophic rhinitis and polypi producing stenosis of the natural opening, frequently cause a suppurative inflammation.

Zuckerkandl, in his treatise on pathological anatomy of the air passages, says: "My experience with the inflammatory diseases of the lining of the accessory sinuses is that they mostly follow pathological processes of the nasal mucous membrane," while Watson of London (in his work) expresses the opinion that nasal polypi are the most frequent causes of suppuration.

The cavities also become infected and undergo changes in diphtheria, measles and scarlatina. Bacteriological examinations of the accessory cavities were made by Dr. Wolff of Paris in 1896 and twenty-two cases were examined. In all there were disease changes in the antrum of Highmore. In seven cases only slight changes were observed, these being mucous and mucopurulent secretions without inflammatory changes in the mucous membrane itself. In the remaining fifteen cases there were more marked changes, the mucous membrane being in a condition of inflammatory oedema with hemorrhage in places. The diphtheria bacillus was confined to the cases with marked changes, and was absent in three out of fifteen. The sphenoidal sinuses were not developed in fifteen cases. In the other seven cases there were more or less inflammatory changes. In six of these the diphtheria bacillus was present. The frontal sinus in the only case in which it was examined was the seat of severe edematous swelling and contained diphtheria bacilli. Five cases of measles and two

cases of scarlet fever were also examined, various bacteria were found, and severe inflammatory changes were found like those in the case of diphtheria.

Influenza is found to be a fruitful cause of suppurative disease; traumatism and syphilis may also be the cause of the trouble.

Text-book authorities seem to be about equally divided as to antrum trouble—on the one hand asserting that disease of the teeth is the most common source of the affection, and on the other believing the majority of cases result from diseases of the nasal cavities. I will quote from a paper read before the A. M. A. in 1896 by Dr. M. D. Fletcher, entitled, "What a Dentist Saw In Examining 500 Crania." "As to diseases of the antrum, it is claimed by the majority of authors that this disease comes more frequently from abscessed upper molars than from any other source. My series of examinations show that out of 252 cases of abscessed upper molars, only 12 perforated the antrum. This would seem a remarkably small number and would indicate that abscessed teeth do not cause antral trouble as often as is generally maintained, and there is good ground for the belief that the teeth may often be affected by disease of the antrum." And later on he states: "It is my belief that if accurate statistics could be had they would indicate that the exciting causes of disease of the antrum is ten to one in favor of intra-nasal diseases."

On the other hand, we find that Dr. William Carr of New York stated before the A. M. A. in 1889 that, "in his belief 80 per cent. of the cases of suppuration of the antrum are caused directly or indirectly by diseased teeth."

In Burnett's system of diseases of the "Ear, Nose and Throat," I find an analysis of thirty-one cases. Thirty-three per cent. were due to dental caries, 10 per cent. to tumors, 22 per cent. to unknown causes, while but 13 per cent. could be attributed to causes arising within the nose. The proportion here attributed to dental diseases seems to me extraordinarily large, likewise the number for which no cause could be found. That it is often impossible to determine which of two existing lesions—dental caries or hypertrophied and degenerated turbinated tissues—is the primary cause of pus secretion in the antrum, I am well aware. However, reviewing what has been written upon aetiology, we find a somewhat startling difference of opinion even among contemporaries with equal opportunities for observation. It would be difficult to account for this discrepancy were it not that most of the writers of ten or fifteen years ago were influenced largely by the purely surgical aspect of the disease. To illustrate, I will quote from Garrotson's System of Oral Surgery. He drew

the conclusion that "diseases of the antrum are for the most part simple in character, easy of diagnosis, and as a rule not at all difficult of treatment." And Louis McLean Tiffany, professor of surgery, University of Maryland, says in his article written for the American System of Dentistry: "The diagnosis offers no difficulty and treatment is simple and rapidly effective." This conclusion is very misleading, and I think it will be borne out only by the experience of the oral surgeon, and not by that of the rhinologist. For reasons at once patent, the former as a rule comes in contact with those cases arising from caries of the teeth alone, and that during or subsequent to the acute stage, while the latter has to deal with those arising primarily in the cavity, or from a diseased condition in the nose as well, and as a rule is consulted only after chronicity is well established, the history often indefinite, and merging into that of polypus, or hypertrophic catarrh, and without those perfectly clear aetiological landmarks which present in the former. Now, if this be true of the antrum, the largest and most commonly affected of all the accessory cavities, it applies with much greater force to the conditions affecting the frontal and sphenoidal sinuses and the ethmoid cells. When these cavities are affected, it is by no means an easy matter to correctly diagnosticate the case, and still less so to successfully treat it.

DIAGNOSIS AND SYMPTOMS.

In spite of the advances that have been made in the study of diseases of the nose and its neighboring sinuses within recent years, we still find abscesses that have existed in these cavities for a long period and have been treated for neuralgia, etc. These facts bring the symptoms and diagnosis to our attention with unusual interest.

The symptoms of empyema of the antrum vary with the intensity of the inflammation and the possible closure of the ostium-maxillare, varying from a mere discharge of pus into the nasal cavity to the most distressing sensations, pain and tenderness. A suppurative inflammation of the nose is an extremely rare affection. It may, however, occur from infection, as, for example, from gonorrheal poison. Aside from the infection above mentioned, there are five possibilities, after eliminating wounds and inflammation following the acute exanthemata, that may give rise to pus in the nasal chamber:

First—Foreign bodies, including nasal polypi.

Second—Diseases of the bone.

Third—Secretion of pus from the antrum of Highmore.

Fourth—From the anterior ethmoid cells.

Fifth—Secretion of pus from the frontal sinus through the infundibulum.

While the secretions from the posterior cells find their way into the pharynx with those from the sphenoidal sinus.

If pus should continue to flow after the removal of the polypi or foreign body, we are then likely to have either an abscess of the maxillary sinus, of the frontal sinus, or of the ethmoid cells. Occasionally it is difficult to differentiate between these, for in each case pus is found in the middle meatus, extending along the inferior border of the middle turbinate body. When this body is sufficiently contracted, which can be accomplished by an application of a 10 per cent. solution of cocaine, the middle meatus will be brought into full view and pus found in the hiatus-semilunaris. If it is not possible to bring about the contraction of this body by cocaine, then the hypertrophied or swollen tissue should be destroyed by means of cautery or chromic acid. The opening of the frontal sinus will be found in front of the ostium-maxillare in a funnel-shaped depression (the infundibulum). Owing to the close proximity of these two openings, it is very difficult to discover from which the pus flows. Hartmann of Berlin has suggested the following method to ascertain the source of the secretions: "After drying the parts thoroughly with absorbent cotton, he drives a blast of air through the affected nostril by means of a Politzer air bag." By this procedure he claims to be able to aspirate the pus from the sinus and thus discover its source.

Another point in the differential diagnosis is that abscess of the maxillary sinus is of comparatively frequent occurrence, while that of the frontal sinus is comparatively rare. The most positive means of differentiating between these two affections is by making an exploratory puncture under the inferior turbinated body about its middle. There is very little pain following the operation and it is devoid of danger. The puncture should be made in all doubtful cases, and its use will, I think, tend to prove that this affection is much more common than is generally supposed.

In continuing, I will limit my remarks as much as possible to the frontal and ethmoidal sinuses. It is very important that these cases should be recognized and treated early, for upon their early recognition depends the final issue, which in many cases has resulted in death of the patient. In well-marked cases the diagnosis of abscesses of the ethmoid cells is not a difficult matter, but in many instances the symptoms are obscure, and there is frequently an implication of one or more of the neighboring cavities, so that it is almost impossible at times to tell which is the source of the pus. Then we can arrive at a diagnosis only by exclusion.

Among the earlier symptoms of abscess of the ethmoid cells may be mentioned pain, neuralgic in character, referable to the bridge of the nose, increasing in intensity with the progress of the disease, and extending outwardly along the inferior orbital ridge, and occasionally along the superior orbital ridge. With a distension of the cells there is a sense of pain, pressure felt in the orbit, and a narrowing of the field of vision. On rhinoscopic examination, if the abscess is of the open variety, pus will always be found in the middle meatus, and if the posterior cells are involved it will occasionally be found passing into the post-nasal space. The middle turbinate may or may not be enlarged. This depends on whether it communicates directly with the ethmoid cells. Occasionally an abscess may exist in the frontal sinus without giving rise to any symptoms except a slight discharge of pus from the nose, but in the majority of cases the symptoms are very pronounced and vary in intensity according to whether the fronto-nasal duct is open or closed. Pain in the frontal region at first is dull and then becomes lancinating in character as the secretions distend the cavities. This is the most common symptom. There is pain on pressure over and under the supra-orbital ridge, and there may also be some redness and swelling of the skin over the affected sinus, which sometimes involves the eyelid. If the fronto-nasal duct is open there will be a discharge of pus from that side of the nose, and upon rhinoscopic examination pus will be found in the middle meatus just under the anterior extremity of the middle turbinate body. This is the variety of the disease most frequently met with. If, however, the duct should be closed, then there is a dilatation of the sinus, with a tendency to bulge at its thinnest part at the inner angle of the orbit, on a level with the root of the nose. If there is no relief, the pus finds its way through the swelling into the orbit or ruptures posteriorly into the cranial cavity. Occasionally abscess of the frontal sinus is complicated with abscess in the ethmoidal and maxillary sinuses. As these cells are in close proximity to the frontal, in all cases of obstinate or prolonged suppuration in this cavity they are involved in the suppurative process.

The method which promised much for differential diagnosis was brought out some years ago. By many it is considered the most valuable agent of diagnosis we possess, while others condemn it and a few speak of it as an elegant plaything. I refer to transillumination. My personal experience with it, however, is limited and unsatisfactory, possibly due to faulty methods of examination, and I hope some one here can come forward with a more favorable opinion.

In passing I refer you to papers of Dr. Codwell (New York Medical Journal, Vol. 58, p. 528) and Frank S. Malbury (New York Medical Journal, Vol. 64, p. 519). These very excellent papers give very full notes on technique and reports of cases.

After reviewing the observations of many rhinologists the results are disappointing. While transillumination has its field as a diagnostic method, it should not be depended upon to the exclusion of other valuable means. Taking all the results into consideration, it may be said that transillumination is of value in some cases to corroborate an already established diagnosis, but that it cannot be regarded as a reliable method, particularly if the other well-known symptoms are absent. I think it might be of more value in watching the progress of cases under treatment than as a method of diagnosis.

I have dwelt thus at length upon the aetiology and diagnosis as the importance of early recognizing the exciting causes of the disease in question cannot be overestimated by one who expects success to attend his efforts toward a cure. When but one sinus or one side is affected and in typical cases seen early, diagnosis is not difficult, but typical cases are not the rule, and it is seldom that the advice of a physician is sought before chronicity has complicated the primary lesion with its confusing sequelae, and then it is that diagnosis will often of necessity sink to the level of a mere conjecture. Of the treatment of these affections I can say very little that is not better told, and as I have already trespassed upon the time of the society, I will refer you to the published reports of cases and the text-books for the detailed methods of procedure. However, in order to bring the subject of treatment before the society for any who care to discuss it, and yet remain under the dominion of this paper, I will state as briefly as possible some deductions made from personal experience and quite an extensive review of the literature on the subject.

First—Not all cases need surgical interference, and many acute cases get well spontaneously, others by treating the hypertrophy of acute coryza.

Second—That we must be guided in the choice of operation by the probable cause of the trouble and its chronicity.

In empyema of the antrum, when due to inter-nasal obstruction or inflammation, remove the obstruction and reduce the inflammation; if the discharge is inodorous and no other symptoms, wash out through the normal opening or puncture in the inferior meatus. If there should be other grave symptoms, such as those due to pressure and death of tissues of the antrum, not due to dental caries, the choice of operation would be through the canine

fossa, and I would only sacrifice a tooth when there is every reason to believe the trouble due to dental caries. As a cause for operative interference dental caries can be excluded from the other cavities.

One of two methods can be chosen for operating on frontal sinuses: Inter-nasal, and by perforating just above the super-orbital ridge. The sinus may be freely opened by enlarging the infundibulum through the nose with a curette, and the sinus irrigated and medicated by means of a soft silver catheter.

The older operation of cutting through the frontal bone is necessary in all cases of extreme exfoliation or necrosis. When the ethmoid cells are affected it is advisable to break through them and curette.

In order not to confuse symptoms and indications for treatment, I have avoided speaking of the sphenoid sinus except in a general way. The posterior ethmoidal and sphenoidal cells, however, form what may be called a posterior group. Their openings are above the middle turbinated body and can be studied only in the rhinoscopic mirror. The posterior ethmoid cells are drained by several openings above and below the superior turbinated bone. Therefore pus found in this region or seen in the posterior examination above the middle turbinated body must have escaped from the posterior ethmoid cells. The sphenoidal opening is in the extreme upper portion of the posterior wall opposite the superior turbinated body, and the usual course of the secretion from it is downwards along the posterior wall close to the septum. The subjective symptoms of empyema of the cells is similar to the other cavities except the headache is referred to the back of the head, and there are more marked ocular symptoms.

I was very much interested in a discussion precipitated by Dr. Bosworth last year before the A. L. A. relative to the frequency of sphenoidal disease. Dr. Bosworth says: "My own records show reports of 150 cases of ethmoid disease, which as a rule yielded more or less satisfactorily to treatment, but in all my experience I have seen but two cases of sphenoidal disease and both terminated fatally." Leading specialists of the country give evidence in their discussions of similar experience. These statements would indicate it to be a rare disease, still more rare as a primary disease and more frequently observed as a complication of abscess of the ethmoid cells.

The operation for relief of the sphenoid trouble is exceedingly difficult even in the hands of experts, the choice of operating being the anterior-nasal and the posterior. The body of the sphenoid can be reached from either angle. The treatment of diseases of the accessory sinuses will occasionally be found very tedious and discouraging, but if care has been taken to establish free drainage and the antiseptic applications thoroughly applied, the majority of patients will recover.

CEREBRO-SPINAL-MENINGITIS.*

By JOHN F. LEEPER, M.D.,

Casper, Wyoming.

In the year 1805 Vieussens described, under the designation of a "malignant, non-contagious fever," a disease which of late years has become one of the most dreaded maladies which the physician is called upon to treat. Previous to that date we have no record of it in the writings of any authority, but since that time we find it treated of at length in the works of all writers on general medicines.

Cerebro-spinal meningitis might be defined as a malignant, non-contagious, inflammatory disease, probably due to microbic infection, and manifested by the occurrence of acute inflammation of the meninges of the brain and spinal cord. That the disease is primarily a constitutional disease, and that the meningitis is but the local manifestation of systemic infection, is abundantly proven by clinical research. Although the disease sometimes occurs as a complication of other diseases, it is usually primary and the patient is stricken down abruptly, without any premonitory symptoms, and is in a dangerous condition from the first, and in a large percentage of cases the disease ends fatally, from the intense hyperaemia of the nervous centers, or from the severity of the cerebro-spinal meningitis.

It is now generally believed that the disease is of microbic origin. The microbe is of an oval shape and occurs mostly in pairs. It resembles the pneumococcus of Friedlander so closely that the best microscopists are of the opinion that they are identical.

Cases have been related by competent observers that seem to show that in some instances the cause of cerebro-spinal meningitis and pneumonia might be identical. The epidemic which I observed occurred in just such weather as would be favorable to the development of pneumonia, but during the whole continuance of the epidemic there were no cases of pneumonia that came under my observance. The rapidity with which the exudation is poured out around the brain in cerebro-spinal meningitis, taken in connection with other symptoms, have led me to wonder if the disease were not a metastasis of the specific cause of pneumonia, which, under certain favorable conditions, took up its seat of action in the meninges, instead of the lungs. This point requires further study, and is a favorable field for original investi-

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gation. That cerebro-spinal meningitis is not contagious is, I think, settled beyond question. That it is dependent upon some local anti-hygienic condition is also highly probable. In one instance I had three children, all there were in the family, sick at one time. They lived on the third floor of a flat, and on the floor below were three other children, of similar ages, who came and went about the sick room as often as they wished. Two out of the three cases died, while not one of the children living on the second floor contracted the disease. The surroundings of the two families were practically identical, so far as outward appearances would indicate. Why one family should be attacked and the other escape is hard to understand.

The lower animals are often affected with the disease. In 1890 there was an epidemic of cerebro-spinal meningitis among the horses in the vicinity of Casper, in which whole herds were exterminated. In one instance the effect of locality was very clearly illustrated. The horses had been dying at the rate of three or four a day, when the owner determined to change the range. They were moved to a new range, only a few miles away, and from that time on only two animals were lost out of the herd.

In the epidemic of last spring I advised all who could to leave town, and although some of the families only moved a few miles into the country, not one case occurred among those who left. This proved to me that the incubative period is very short, and that the cause or causes of the disease are limited in area. In no instance has the disease been transported from one city or locality to another, so far as I am aware.

In May and June of the present year I attended eighteen cases, six of which were fatal. Of the six fatal cases one died in thirty-six hours and all died in less than five days after being attacked. The first case was that of a little girl aged 6 years, who was taken with vomiting about 11 o'clock at night, which, after an hour or two, subsided, and she slept well until morning. I was sent for next day about noon and found the child about the house, feeling fairly well. I did not examine her very closely, but concluded, from the history of the case, that she had had indigestion and that all she needed was simple treatment, and so I informed the parents. I prescribed a mixture of pepsin and bismuth, and when I heard from her that evening she seemed as well as ever. She played in the yard after supper and went to bed at the usual hour and slept well until about midnight, when she waked up crying with the headache. She vomited, and when the parents found that the medicine that I had been giving did not relieve her I was sent for and found her in a semi-conscious state, with widely-dilated pupils, with the head retracted

and the arms flexed strongly at the elbow. Upon trying to straighten the arms it seemed to cause suffering, and the slightest touch about the chest or abdomen seemed to cause intense pain. After a careful examination I pronounced the case cerebro-spinal meningitis, and told the parents she would probably die. Nothing that I could do seemed to benefit her in the slightest degree, and she died next day at 2 o'clock p. m. The surface was covered with petechial spots, which, several hours before death, became purple and sometimes black. Death was apparently due to failure of respiration, the breathing becoming irregular and finally stopping altogether, while the pulse continued to beat after the breathing had entirely ceased. I relate to you this case only to call attention to the fact that the disease is characterized by remissions, when all the symptoms are improved, and the physician and family are liable to believe that the danger is past, when in a few hours, or even minutes, the symptoms return with increased severity, and, if the physician has given a favorable prognosis, he is now placed in a very unenviable position.

The symptoms vary in different cases, but in all the cases treated by me in this epidemic the onset was sudden and usually attended by vomiting. Most of the cases developed in the afternoon or early part of the night. I did not see a case where the sickness began in the early morning. Among the earliest symptoms are those relating to the pupil of the eye. In most cases the pupil is found dilated and it does not react readily to light. In some of the cases observed by me there was irregular contraction. In one case one of the pupils was crescent-shaped. In some cases there is marked strabismus, which is usually convergent. The skin presents appearances which, taken in connection with other symptoms, is highly characteristic. In even the mildest cases there will be found certain eruptions. In some of the mildest cases small, symmetrical, rose-colored spots will be found scattered on the surface, which are most pronounced on the soles of the feet and palms of the hands among children. In the most serious cases the eruption may be in the form of petechiae, or may be as large as a dollar. The eruption seems to be a hemorrhage into the skin. I did not observe any hemorrhages from mucous surfaces in any of my patients.

In regard to the treatment, I found that in some cases cold applications to the head and spine were well borne and seemed to do good, but in a great many cases they produced too much disturbance and required force in some cases to keep them on at all. After trying both my preference is for heat instead of cold. My plan was to shave the head and make a poultice of flaxseed meal, made somewhat irritating with mustard, in the shape of a cap,

to completely envelope the head, and another along the spine. These were changed every few minutes, applied as hot as they could be borne. This I kept up night and day until the symptoms began to abate. Internally I am opposed to the use of morphine or opium. I tried both faithfully but was disappointed in their use, and finally discarded them altogether except as an adjunct to other medicines. I used bromide of potassium for the restlessness and headache and gave the veratrum-viride in frequent and full doses. In using veratrum-viride I preceded the dose with a small dose of deodorized tincture of opium to prevent the nausea produced by the veratrum. Two cases treated in this way recovered when the symptoms seemed as bad as any of those that I lost on other treatment. In the declining stage of an epidemic there are a great many abortive cases in which the symptoms start in severe but cease as suddenly as they began, and recovery takes place in a short time.

In still other cases the disease is prolonged for several weeks, while the symptoms are at no time severe, recovery taking place with simple treatment.

I would like to go fully in detail in regard to this important disease but have not got the time, and so will close, asking the society to excuse this poor effort at handling a very important subject and promising to do better at the next meeting, when I hope to be present myself and renew old acquaintances and make new ones.

HOW DOES THE CAUSE OF DISEASE PRODUCE DISEASE—A FURTHER STUDY.*

By G. M. RUSSELL, M.D.,

Dixon, Wyoming.

In the Journal of the American Medical Association of July 2, 1898, appeared an article entitled, "How Does the Cause of Disease Produce Disease? A New Interpretation of Operative Principles," by Dr. W. R. Dunham of Keene, New Hampshire.

The subject matter of this article appeared to me to be worthy of some study and consideration and to be of such a nature as might prove of interest, at least to some of the members of this society.

Dr. Dunham holds that vital force is the only active force responsible in the manner of causing disease. He quotes from

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a distinguished editor of an American medical journal as follows: "There is no drug yet discovered, unless it be alcohol, which adds to the forces of the body." He then goes on to say: "But even this only source will be discredited when it is recognized that medico-biologic science is based entirely on the functions and operative principles of the vital force energies; therefore in place of teaching medico-biologic science as being based on functions and operative principles, derived from both within and without, this division of natural science will have its recognized first principles beginning with the comprehension of the nature of the vital force agency."

He also quotes from Henry Maudsley. "It is easy to perceive how impossible it is in the present state of science to come to any positive conclusion in regard to the nature of vital force. This generation and generations to come will have passed to their everlasting rest before a discovery of the secret of vital activity is made." Commenting on this he says: "Notwithstanding such statement the vital force problem, as implied in the operative plan of its several ultimate principles, is already solved, and is no more difficult to comprehend than the Copernican plan of astronomical science and may be as positively demonstrated."

He lays great stress upon his definitions for sensibility, instinct, sensation and contractility and says a proper understanding of them is necessary in order to comprehend his theory.

His entire theory is based on sensation and its transmission, in that pathologic processes are set up by irritation reflexly; that the conditions called health and disease are each presented or executed as involuntary acts in response to existing sensation, normal or abnormal. That medicine is useful, not because of an associated active principle, but as the means from a relation of contact for the development of special sensations—the idea that medicine acts is misleading; there is no medical power, but medicine causes special sensations in response to which involuntary life acts are exercised; that the cause of disease does not attack the organism; that the food or soil favorable for development of bacteria in the human system is made to exist largely from pathologic vital action, and thus in the virus produced by non-recurrent contagious diseases micro-organisms will multiply into millions and perish when the food supply or *materies morbi* is no longer liberated—in such instances the presence of the microbe becomes a consequence rather than a cause of the disease; that the "special virus" is a product from pathological vital action and not a poison excreted or secreted by the microbe—the microbe does not come in and attack the human organism, but simply multiplies and consumes the virus as scavengers—that it

is the virus and not the microbe that becomes the cause of the disease; that the microbe is not sufficiently complex to perform the function of excretion or secretion of poison and does multiply and perish rapidly; that it is only the micro-organisms which have been developed from some virus cause of disease that cause pathological disturbances to be manifested.

It would seem to me that in endeavoring to reason out the method in which the cause of disease produces disease, Dr. Dunham made his cause of disease to conform to his new theory, instead of modeling his theory to conform to the accepted cause. At any rate, he has lost sight of the real cause itself, and there is danger of leaving us just where we were before the microbe and its relations to disease were discovered. The only demonstrable causes of certain diseases are the micro-organisms, and as we all know, the bacterium of each disease has its own peculiar characteristics, and it is always found in the disease which it produces if looked for by a competent and careful observer. The same disease is caused by the same microbe when introduced into a healthy organism, and yet in the face of the evidence that the absolute causes of these diseases are microbic in character, this new theory is advanced, refuting and branding as false the positive knowledge which the results of many years of labor and investigation have made one of the pillars upon which the science of modern medicine rests; assuming that the microbe is generated *de novo* and adopting instead a vague, indefinite "special virus" liberated by vital force, the initial cause of which is irritation—and by what? He does not state what the irritation may be which in the first place causes an impulse to pass in through the sensorium and cause reflexly the liberation of virus, nor does he enlighten us as to the material from which the special virus is produced, nor yet again from what the microbe may result. The microbe again is but a scavenger to consume the virus. Then why would it not be better to introduce them and aid and succor their growth in order that the virus may be the more quickly devoured? Why are the modern surgical methods so successful in dealing with diseased conditions? Can it be possible that the antiseptics in use, so destructive to the bacterium, are in every case coincidentally destructive to the special virus? Then as to the differential cause he makes no provision, whether there is a different kind of irritation necessary to produce diphtheria from that which is required for typhoid fever or measles, or whether it is necessary that the irritation should be produced upon a certain set of nerves for its differential effect.

He says we should observe a distinction between primary and secondary causes. The former may occasion a disturbance

which in itself later develops a great variety of secondary causes for the continuance of disease. According to this, why should we not have a cycle of all diseases, each new batch of virus serving as an irritation for a succeeding lot? Then as to the army of disease microbes, which he says is not hovering in the air awaiting an opportunity to attack exposed tissue, we are all aware that the great mass of microbes in the air are non-pathogenic.

The only way in which he explains the method of causing disease is through a reflex; but that is not sufficient; it does not take us to the last step in the process. To what particular cells and what particular organ or organs does the reflex go? Of what nature is this special virus, how is it elaborated and from what? What causes the original irritation? If virus which has been introduced, what shape is it in and how has it gained entrance? In fact, what are the successive steps from the introduction of the cause of the original irritation to the elaboration of the virus? After elaboration of the virus what becomes of it if it is not consumed by the microbes?

Vital force is like the mind, an unknown quantity. It is, as an eminent alienist has pictured the mind, "but an organist," and when the organ is out of tune or out of repair the result is a discordant jumble. And so with the organs over which vital force presides. When the cells of the organs have departed from a state of health or from a state of "harmony with their environments," as one author puts it, vital force can do nothing but what the organist would do—strike the proper keys. We are no nearer the solution of the vital force problem than we were at the time Maudsley wrote the words above quoted, and I see no more reason for accusing vital force of that of which it may be innocent than I do for ascribing to "reflex" all the ills of humanity for which we can discern no other cause. Judging by analogy, however, I cannot believe that vital force changes its character any more than any of the other forces of nature, nor, by the same process of reasoning, do I see why it should be governed and controlled by irritation. The results of the actions of the other forces of nature vary with the nature, condition and properties of the objects upon which they act, and why should vital force be an exception in this?

Every cell of our body is bathed in lymph, which is the food vehicle, and in this fluid are all the substances which are absorbed and to be assimilated. In it there may be toxic elements or principles, or the elaborators the microbes themselves, or whatever may be the pathogenesis. The cells then are out of harmony with their environments, bio-chemical changes take place which alter the shape and composition of the cell and perhaps results in

its death. The cell being so altered, the result of the action of vital force is likewise altered and modified or lost entirely.

The solution of this problem cannot be definitely made until we can compare the bio-chemical composition of the live, healthy cell with that of the diseased cell. Just as the key of an organ may be out of tune by any number of different degrees, so may the bio-chemical composition of the live but diseased cell differ in a variety of forms.

We can follow our toxic producers or their products through the digestive or respiratory tracts into the blood. We can follow them into the lymph and can find them in the cells themselves, but their positive and ultimate action with respect to the changes and alterations in the bio-chemism of the cells is yet to be discovered. It is at this point where vital force and materialism meet. Here is the missing link in the mode of cause of disease. What particular modifications are necessary, and in what infinitesimal degrees these modifications must differ to produce the various phenomena we call disease, remains for further scientific investigation. Certain it is that these modifications differ according to the pathogenic cause. It would appear to me that the toxic substance coming in contact with the cell changes its bio-chemical composition just as a chemical reagent changes that of a salt; that the strength and nature of the reagent (virulence and kind of the toxine) is the measure of the amount of variation from the normal composition, and this variation gives us our different forms of disease of our various organs and their degrees of severity.

Medicines, then, act in the same manner in which the toxic elements do, i. e., by altering the bio-chemical composition of the diseased cell, neutralizing the action of the toxins and bringing the bio-chemical formulae back to the original normal. As the bio-chemical composition of the cell varies from the normal, so does the result of the action of vital force upon it vary from the normal.

It is not within the province of this paper to argue for or against the germ theory of disease. The consensus of opinion of scientists is that microbes are the cause of most disease, which opinion is based on facts which have been proven and reproven by years of thorough investigation by competent men. Why should we abandon these facts and resort to theory and speculation of which we have too much already? Time would be much better spent in investigating the changes which undoubtedly take place within the cell protoplasm when brought in contact with the toxins.

Practical, material research is the need of the hour.

HICCOUGH: REPORT OF A CASE.*

By W. A. JOLLEY, M.D.,

Rawlins, Wyoming.

We are all so familiar with the "hic" of the drunkard that the following history of a case of hiccough may be of interest to you for a contrast:

Mrs. L., age 26, Cuban, married, borne children and had miscarriages, has had pain in right chest for several years and at intervals spits blood.

August 12th began to spit blood and complained of severe pain in right chest. The next morning began to hiccough six to ten times in rapid succession; stop for two minutes, then start again. The intervals of rest were never over five minutes unless the patient was completely under the influence of bromides and morphine, which the attending physician prescribed.

I first saw her August 16th, 10 a. m., after she had been hiccoughing for three days. She was nearly exhausted as she had taken no food; pulse 120; was sore all over.

Prescribed antipyrine $7\frac{1}{2}$ grains every 3 hours; ammonium chlorid 15 grains in mist. glyc. comp. 5i every three hours. Ice bags were placed over pain in right chest and over stomach, but no relief was obtained. Mustard plasters were then applied but gave no relief.

10 p. m.—Condition not improved. Gave her morph. sulph. 1-16 gr., atropine sulph. 1-300 gr., strychn. sulph. 1-30 gr., and inhalation of 10 grains of menthol dissolved in 2 drams of chloroform during paroxysms. Intervals of rest lengthened and she was able to sleep from 12 p. m. to 6 a. m., when the hiccoughs started as bad as at first. Gave 2 comp. cathartic pills, inhalations of menthol in chloroform, and antipyrine $7\frac{1}{2}$ grains every one and a half hours. Intervals gradually lengthened and at 10 p. m. went to sleep and slept until 5 a. m. She had an occasional paroxysm for several days.

As to the cause, I am unable to determine.

She has some uterine and ovarian disorder in addition to the chest trouble, but I was unable to determine the exact lesion of either. She also had a gastritis at the time. Whether it was due to the medicine I do not know.

Among the remedies which I saw recommended were the following: Holding the breath as long as possible, rapid breath-

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ing, lavage of stomach, rhythmical traction of tongue, pressure upon phrenic nerve, using snuff and nearly every drug in the U. S. P.

December 5th patient sent for me, said that she had taken cold and was afraid she would have another attack of hiccoughs. Prescribed an expectorant, but they started at 3 p. m. Antipyrine was administered after an active cathartic. Paroxysms stopped at 1 a. m.

THE PROPHYLAXIS OF PUERPERAL INFECTION.*

By C. H. SOLIER, M.D.,

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Evanston, Wyoming.

The subject I have chosen for consideration to-day would seem to be worn quite threadbare from its having been so often used as a theme for discussion. Yet the urgent necessity of a more strict adherence to the principles of aseptic and antiseptic surgery in obstetrical practice is so apparent that I trust the few moments given to its consideration will not prove profitless.

Probably when mankind was in its primitive state, not yet perverted and enervated by the environments, habits, restraints and diseases of modern life, the process of parturition was largely a physiological one, and practically devoid of danger. Our civilization unfortunately, however, has so modified these conditions that this process may well be regarded as a complicated pathological one, and one demanding on the part of the obstetrician the exercise of a high degree of caution, discretion and practical knowledge. In fact it is probably true that the practice of obstetrics entails upon the physician a greater degree of responsibility than that assumed in any class of cases excepting, of course, surgical ones. Death from any cause is instinctively dreaded, but the death of a mother, either at the very threshold of active life or later, when entrusted with the care of a growing family, is indeed an awful calamity. And woe to him who by any act of ignorance or carelessness, shall convert this occasion of hopeful rejoicing to one of disconsolate mourning and despair.

Probably in no branch of medical or surgical practice is there a more convincing demonstration of the fact that ours is a progressive art than in the remarkable reduction in recent

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years of the mortality attending the puerperal period. In hospitals and maternities where careful statistics have been kept, the results are indeed surprising. The present mortality in many of these institutions is almost nothing. This is the more remarkable when we consider the fact that their patients are largely composed of the homeless class, some of whom were taken in labor before admission, and many of them in a deplorable condition as the result of protracted labors or severe operative measures which had been unsuccessfully attempted elsewhere. For example: Dr. Goodell has stated that at the Preston Retreat, in 756 cases of labor, there had been but two deaths from sepsis. Dr. Palmer of Cincinnati recently stated that twenty-five years ago the mortality in puerperal cases at the Cincinnati Hospital was 10 per cent. Now it is almost nothing, there having been no deaths in the past three years. It is unnecessary to multiply instances of the favorable results attained in numerous maternities, both in the United States and in Europe. Suffice it to say that the achievements of aseptic and antiseptic midwifery, as practiced in these institutions, rank with those of modern surgery.

It is well known that the results in private practice are far from being so satisfactory. It is true that the murderous epidemics of a generation ago are now happily unknown. But the mortality is still large and casts a certain degree of odium upon the general practitioner. It is really too much to expect as favorable results in private practice, for there are many obvious disadvantages encountered that are detrimental to the aseptic conduct of labor. Many of these unfavorable conditions are inherent to private practice and are unavoidable. Such are unsanitary surroundings, incompetent and untrustworthy nurses and at times the extreme difficulty if not impossibility of successfully carrying out the details of asepsis and antisepsis. But in spite of all these considerations there are too many deaths in private practice from puerperal infection. What is the reason? Simply because so many men fail to appreciate the essentially surgical nature of an obstetrical case. Consequently they omit altogether the details necessary to secure surgical cleanliness or they attend to them in such a slovenly or perfunctory manner that it vitiates the whole procedure. It is a well understood fact that measures to secure cleanliness are not equally and uniformly necessary as in surgery. As one writer has it, "It is perhaps possible for a physician to deliver in succession a hundred women in utter disregard of aseptic measures and still have no fatal results." I have sometimes thought that the successful obstetrician was a good example of the law of the survival of the fittest. It is only

the man well endowed with tact, perseverance and determination who can successfully withstand the determined opposition, through ignorance or false modesty, that is so frequently encountered in one's efforts to secure all the conditions necessary to the aseptic management of labor. When once this opposition has been yielded to, it is quite easy to acquire loose and careless methods until finally some fatal case of sepsis suddenly arouses the negligent physician to the necessity of a radical reformation of his methods.

In private practice the physician is exposed to so many and to such varied sources of infection that any rational system of prophylaxis must begin with the physician himself. In this connection Dr. William D. Porter of Cincinnati states in a recent number of the Medical Fortnightly that "The most urgent requirement is that the physician approach each case with clean hands, and all intelligent physicians try to do this. The difficulty of cleansing the hands would be considerably diminished if we were more careful in avoiding the sources of contamination. For instance, in opening an abscess it is not necessary to bathe the hands in pus. By the free use of absorbent cotton or gauze it is possible to avoid soiling the fingers in the least. Moreover, after such soiling the time to disinfect the hands is immediately. In this way the physician would escape the infection of his clothing, and the infectious material would not have time to get fixed in the epithelial crypts of the skin." He advises that similar precaution regarding hands and clothing should be observed when attending contagious diseases. The avoidance of contamination and prompt disinfection after exposure should become the instinctive practice of every physician. Indeed, the cleansing of the hands is the most important of our prophylactic preparations. A nail brush and a cake of aseptic or preferably an antiseptic or germicidal soap should be a part of every obstetrical outfit. When the hands and the nails have been thoroughly scrubbed, they should be bathed for a few moments in a one to 2,000 bichloride solution before any vaginal examination. Such a solution is more easily kept warm in a quart pitcher and should always be placed where it can be readily reached.

The preparation of the patient and the bed is a matter about which the physician is rarely consulted, and one in which he is often required to exercise his authority. The patient must be impressed with the importance of cleanliness about her person, clothing and bed. The latter is often littered with unclean cloths with which the hands can scarcely escape coming in contact at some stage of the labor. It should therefore be a routine practice to see that not only the patient's clothing, but everything

about her is clean. While a complete bath will usually be impracticable, it is always possible, except in emergencies, to have the genitals, thighs and anal region thoroughly cleansed. The hands also of the mother should not be overlooked. Serious cases of sepsis have been traced to the manipulation of the genitals by the patient during labor.

The subject of ante-partum vaginal douches seems at present to be one of the most debated questions in obstetrics. It is a well-proven fact that the external genitals provide favorable conditions for the development of pathogenic bacteria and authorities are practically agreed that these parts, as well as everything that comes in contact with them, should be rendered as clean as possible, but as to the existence of pathogenic germs in the vagina, there seems to be a marked difference of opinion. Dr. Williams of Baltimore, after an examination of more than 100 cases, and after considering the findings of other investigators, states that the reason that some of the investigators had reported pathogenic organisms in the vagina, was because they had made use of a large speculum, which had carried in with it some of these organisms from the external genitals. By taking the necessary precautions to guard against this source of contamination he arrived at the following conclusions: First, as the vagina does not contain pathogenic germs, self-infection with such germs is impossible; second, if the vagina really did contain streptococci, frequently a vaginal examination would be very dangerous, which it is not; third, the vagina may occasionally contain bacteria capable of giving rise to mild sapremia; and fourth, death from puerperal sepsis is due to infection from without.

On the other hand, the bacteriologists generally believe that the vagina is the habitat of certain pathogenic germs, though its acid secretion has an inhibitory influence on these organisms. But it is also contended that during the progress of labor large quantities of alkaline secretion is poured out of the uterus which neutralizes the vaginal secretion, and thus for the time prevents this inhibitory influence on these germs. It is further claimed by the advocates of antepartum irrigations that during vaginal examinations there is danger of carrying into the uterine cavity those germs which are normal to the vagina. Certainly when there is evidence or well founded suspicion that the vaginal secretion is abnormal, as for example, gonorrhoeal, there is no question whatever but that frequent irrigations of strong antiseptic solutions should be employed. In the absence of such indications the opponents of antepartum douches claim that sterilization of the vagina by scrubbing with soap and by the use of strong antiseptic injections is meddlesome widwifery. They in-

sist that these strong injections destroy the normal lubricating fluids of the vaginal mucous membrane, which materially conduces to the easy birth of the child. The consensus of opinion of our leading authorities seems to be that the antepartum injection should be limited to those cases in which the character of the vaginal secretion clearly indicates it, and to cases where operative or instrumental interference becomes necessary.

The advisability of digital examinations for the diagnosis of the presentation, or to ascertain the progress of labor, has lately become the subject of discussion. A recent contributor to the *Medical Record* argues that such examinations are not only unnecessary, but dangerous; unnecessary because the presentation and progress can be readily determined by abdominal palpation and by careful observation of the character of the pains, the exclamations and general behavior of the patient; and dangerous because of the alleged impossibility of rendering the hand perfectly aseptic. It does not seem probable that any respectable number of physicians will accept such apparently extreme views. They are undoubtedly a natural reaction against the old practice of making too frequent and too extensive vaginal examinations. It may be that an obstetrician of extended experience and of exceptional ability might successfully pursue this proposed method, especially if he insists and has the opportunity of examining his patient before the beginning of labor. But it seems much more certain that, for obvious reasons, the physician possessed of more limited experience and ability will sooner or later regret the adoption of this method. After a careful examination, made under aseptic and antiseptic precautions, there is no need of its repetition except at rare intervals. Nor is it necessary to insert the examining finger into the uterus unless there are clear indications for such a step. As to the impossibility of sterilizing the hands, the results of aseptic surgery would seem to positively prove the contrary.

One of the essential conditions of sepsis is trauma. Indeed, without trauma it is impossible for septic infection to occur. While there is always present a denuded endometrium, the extent of the contusions and lacerations of the cervix, vagina and perineum will be largely determined by our management of the second stage of labor. If this has been faulty and these wounds are extensive, there is at once presented a condition favorable to the entrance and development of septic germs. The use of chloroform to control violently expulsive pains, the support of the perineum and the cautious yet timely use of the forceps are measures familiar to you all, yet they cannot be overlooked in the consideration of the etiological factors and consequently the

prophylaxis of septic infection. Within the past year I have seen in consultation two cases of septicemia, one of which proved fatal, where I am satisfied that the infection occurred primarily from extensive perineal lacerations. The prompt repair of such lacerations will tend to limit the area of lacerated tissue, and to that extent lessen the susceptibility to infection.

In the postpartum treatment of every case there should be frequent cleansing of the vulva and the adjacent parts, preferably with an antiseptic solution, after which there should always be applied a well-fitting antiseptic pad. The use of antiseptic postpartum irrigations after uncomplicated natural labors, is an other unsettled question that is much debated. In this practice as in surgery, our course should be governed by the indications. In the cases just mentioned there does not seem to be any necessity for such irrigations, as the frequent cleansing of the vulva and the antiseptic pads would seem to meet all the indications. But when, as frequently happens, after the third or fourth day the lochia becomes fetid, douches are clearly indicated. It is well to remember in this connection that while the patient is in the recumbent position the upper border of the cervix is below the level of the posterior commissure, thereby producing more or less vaginal retention of the lochia. Not only in the event of fetid discharges, but also where there have been much bruising and laceration of the cervix, vagina or perineum, I have never hesitated to make use of daily irrigations of hot antiseptic solutions. Sometimes I have used sterilized water, occasionally one to 3,000 bichloride solution, but more frequently a 1 per cent. solution of lysol. I believe there is no question whatever but that, in the hands of a nurse of average intelligence, such injections are valuable in many ways, not the least of which is the stimulation of healthy granulations and consequent avoidance of septic absorption.

It is universally conceded to be a legitimate if not an imperative practice to employ intra-uterine irrigations after every case of manual or instrumental delivery. While it is probable that if such operations have been performed under aseptic and antiseptic precautions, the irrigations might be dispensed with, yet the possibility of infection seems to be a sufficient justification for this procedure. Personally I have always felt that I was shirking a plain duty if I did not scrupulously observe this rule.

In the limited time at my disposal I have but briefly mentioned many interesting and essential phases of this most important subject. I will only add, in conclusion, that no matter how well qualified by knowledge and experience we may be for this line of practice, and regardless of the patience and skill which

we may have employed in any particular case, unless the puerperium is kept under careful observation our duty has been but partially performed and all our efforts may come to naught. In localities where we are deprived of the services of competent and trained nurses and where we must be satisfied with those who are ignorant, superstitious, obstinate and negligent, daily visits cannot with any degree of safety be omitted. The storm of septic infection does not come all at once, but certain premonitory indications warn us of its approach, so that prompt and vigorous measures will often modify it favorably. I believe that the early recognition and treatment of septic symptoms will save many lives that would otherwise perish.

DISCUSSION ON DR. SOLIER'S PAPER.

By MRS. CHARLOTTE G. HAWK, M.D.,

Green River, Wyoming.

Mr. President and Members of the Profession:

This is a paper of unusual interest to me, as my work naturally, as you might suppose, falls into this line.

The puerperal state is unique in its position, "being on the borderland," as Lusk puts it, "between the physiological and the pathological."

Conditions which in the pregnant woman are physiological, under any other circumstances would be pathological. For instance, the congestion of the uterus in the early stages or the thrombi which form in the placental sinuses. But while these are physiological, yet it places the woman in a condition of danger, for the increased activity of the circulatory system renders the parts liable to take up any septic material that may find its way into the vagina, and the physiological thrombi may become pathological, with all its disastrous results if infected.

Statistics are alarming on these cases, and the worst of it is that it falls upon the most valuable class, mothers of families, whose loss is a national as well as a private one.

I do not like the use of vaseline as a lubricant, as I think it is liable to carry infective material. I prefer a good soap, carbolized for instance. I use the douche after confinement for cleanliness as well as comfort to my patient. But if I have not a reliable nurse I see to it myself, as there is a liability of something being carried in there that may infect.

REPORT OF A CASE OF FOXTAIL INFECTION.*

By R. C. CHAMBERLAIN, M.D.,

House Surgeon, Wyoming General Hospital.

Rock Springs, Wyoming.

Through the kindness of Dr. R. Harvey Reed, superintendent and surgeon in charge, I have the pleasure of reporting to you a very interesting and unique case of foxtail infection. Foxtail, or squirrel-tail grass, as it is sometimes termed, is probably well known to most of you and will require but little description in connection with the report of this case. Suffice it to say that it grows in rather dense tufts of eight to twenty inches in height, with short, flat leaves and compact, elongated heads, or spikes, which are made up of a number of spikelets growing from a central stalk or stem. These spikes at maturity become disarticulated and the seeds, with their barbed beards, set free to be scattered hither and thither at the mercy of the winds. In this mature condition the beards become very tough and stiff, and owing to the angle at which the barbs grow from the beards, when they once enter a tissue they readily pass still deeper, carrying with them a poison, the exact nature of which has not been fully demonstrated.

So great is the havoc this grass plays among the horses and cattle of this state that Professor Nelson of the experiment station at the State University has just recently written a very interesting article in which he describes its botanical characteristics and habits, and its rapid growth in an alkali soil like ours. He also demonstrates the manner of infection and the nature of the injury inflicted, and very strongly urges its early extermination.

The intensity of the infection and the effect on the human economy is demonstrated somewhat clearly in the following case:

Peter B., age 35, male, white, single, laborer, was received at the Wyoming General Hospital from a west-bound train, August 27, 1898, by the order of Dr. H. M. Bennett, county physician, Rawlins, Wyoming. No history of the case could be elicited from the patient at this time more than that he was suffering greatly and wished to be left alone. A few days later, however, when questioned closely, he said that on August 13, 1898, while riding on a load of hay from the field to the stack, he passed two heads of foxtail grass into the urethra, and when

* Read at the second regular meeting of the Wyoming State Medical Society, held at Rock Springs, Wyo., November 1, 1898.

he attempted to remove them he was unable to do so. He could assign no reason for such an action further than that he was in a playful mood and did not know how to amuse himself otherwise. He experienced little or no inconvenience from this for three or four days, when the penis began to swell and he had difficulty in voiding his urine. He suffered in silence for a few days, during which time he deserted the "tie camp" and wandered off some twelve miles in the mountains, where he was discovered by his fellow laborers; ashamed, as he said, to approach his comrades or a physician, but was finally compelled to consult Dr. Bennett, with the result that as soon as satisfactory arrangements could be made, he was sent to the hospital.

On examination the extremities were found to be cold, the temperature 97 degrees F., the pulse 112, the tongue furred and the teeth covered with sordes. The abdomen was very tympanitic and the bladder greatly distended, as was demonstrated both by palpation and inspection. The penis was swollen to fully twice its natural size, when in the erect condition, while there was a marked phimosis with a white and very fetid discharge from the urethra. The scrotum was swollen to about the size of a large cocoanut, very hard and ecchymotic.

He was immediately catheterized and fully four pints of urine drawn off. A quarter of a grain of morph. sulph, with 1-150 grain of atropine was given hypodermically, followed with hot milk and whisky by mouth. A bichlorid evaporating solution* pack was applied to the penis and scrotum, which was supported by a T bandage; hot water bags were put to his feet and legs and he was covered with hot blankets. That night he was ordered morph. sulph. q. s. to secure rest and fractional doses of calomel, to be followed in the morning with salines. He rested fairly well and in the morning, after a thorough evacuation of the bowels, seemed brighter and more talkative. His temperature was 99½ F., and his pulse 115. He was ordered to be catheterized every eight hours and the bichloride pack continued. Tonic doses of quinine sulph. were ordered three times a day and 1-60 gr. of strych. sulph. every four hours; also whisky, egg-nog and milk punch.

On the third day after his admission the lower portion of the scrotum began to slough and a few days later the underside of the penis. Almost simultaneously there was an abscess formed just above and to the right of the symphysis pubis between the deep fascia and the abdominal muscles. On the fifth day after his admission his temperature fell to 94 degrees F. and ranged be-

* Bi-chlorid Evaporating Solution—80 parts boracic acid sol. 3 per cent.; 10 parts alcohol; 10 parts glycerine, and 8 drops of a saturated solution of bi-chlorid of mercury to the pint. The saturated solution used being 2 oz. hydrg. bi-chlorid to 3 oz. of alcohol and 6 oz. of glycerine, 8 drops to the pint, which equals 1 to 3,500.

tween 94 degrees F. and 97 degrees F. until several days after his operation, which was made on the tenth day after his admission.

Great quantities of tissues began to slough from the inner side of either buttocks, and a small abscess was formed a few inches down the left thigh. Stimulation was kept up vigorously, and, like the good Samaritan, antiseptics poured on abundantly, but to no avail.

On September 6th the entire scrotum had sloughed away, leaving the testes without a covering and thus invited septic material to follow up the cords. About one-half of the integument of the penis was gone and the penile portion of the urethra had sloughed an inch and a half in one place and a small opening in another. There was a cavity in the inner side of either buttocks into which the fist could easily be thrust and which involved all of the soft parts between the perineum and tuberosities of the ischii. Also one on the abdomen that would measure four by five and a half inches. Notwithstanding this intense infection there was no enlargement of the lymphatic glands, neither lymphangitis nor phlebitis. It was decided at this time that an operation was the only thing that would give the man any chance for his life, and accordingly he was anaesthetized, the cords were tied in the usual manner for a castration and the testes removed. The cavities were thoroughly curetted and flushed out, and several spikelets of the foxtail recovered from each sloughing focus. A packing of gauze saturated with a 10 per cent. solution of creolin was then inserted, and the dressings fixed with adhesive straps. A soft rubber catheter was passed into the bladder and fastened to the penis with adhesive so that by means of a rubber tube the urine was drained into a bottle, attached to the side of the bed. During the operation an attempt was made to take a picture showing the destruction that had taken place, but it proved to be unsuccessful as the parts were not brought out clear and distinct. The evening following his operation his temperature registered 95 degrees F. and his pulse 84 and very feeble. The next morning it rose to 97 F. and the pulse was 86. The packing was removed and the cavities repacked with a 10 per cent. creolin solution. This treatment was continued with a few changes to meet the symptoms that arose until the tenth day after his operation, when his temperature became normal and his pulse 88.

The tonic treatment was kept up for about ten days longer, when his appetite became good, he slept well and began to grow fat. Since then he has received no internal medication. The stimulating dressings have been continued and the catheter changed each day.

At the present time the cavities in the buttocks have about closed, the one on the abdomen has completely repaired .. " he is able to walk about the ward. The phimosis still exists and but little repair has gone on in the penis, so that there is still a question as to what the ultimate termination of this organ will be. One of two things seems to be indicated, either to repair the urethra and bring the scanty integument together to cover it, and at the same time remove the phimosis, or to make a complete amputation. In either event I would be pleased to report the result at some future time. I also wish to say that during your visit to the hospital this morning the specimens and patient will be presented at the clinic.

SYNOPSIS OF DISCUSSION ON REPORT OF A "CASE OF FOXTAIL POISONING."

By R. HARVEY REED, M.D.,
Rock Springs, Wyoming.

The case just reported by Dr. Chamberlain on foxtail poisoning is certainly unique. As the doctor has described the plant and the particulars of this case in his paper, I will not take up your time repeating it. But I wish to call your attention to the peculiar features of the case and the peculiar action of this infection as manifested in this particular case. From the party's own statement we are lead to believe that the foxtail was passed into the bladder through the urethra, and the spears having separated from the head of the foxtail, immediately commenced to penetrate the soft parts of the pelvis, a part of them escaping into the right iliac region, while the others escaped on each side of the urethra in the ischio-perineal region, destroying the soft parts until the ischium was exposed on either side.

Another "flock" of these barbs penetrated the scrotum, causing necrosis of not only the scrotum but of the testicles, all of which we were obliged to remove a few days after his admission to the hospital.

At this time we found about one and a half inch of the perineal portion of the urethra destroyed. It seems that wherever these little barbs, which are so arranged as to continue their course in a given direction, that direction depending upon the location of their point to a certain extent and also to the actions of the muscles through which they moved, that they continue to work their way onward until they meet some insurmount-

able barrier or set up such a terrific inflammation, followed with suppuration and necrosis, until their escape is effected.

Dr. Solier—Doctor, to what do you attribute the toxic effect of the foxtail poisoning?

Dr. Reed—I am sure, doctor, I am not able at this time to fully answer your question. I am inclined, however, to believe that, like any other foreign body, it sets up an irritation of the parts penetrated by it, and at the same time it carries with it whatever germs may have clung to it. From what little experience I have had I am not inclined to believe there is any specific poisoning in the foxtail itself, but owing to its peculiar formation it is capable of retaining in its meshes, so to speak, germs which would infect the parts which are in a condition to be infected, owing to the inflammation induced by the presence of this strange foreign body.

The history of the case clearly shows that the destruction of the soft parts came from the introduction of the foxtail, as the man admitted that he had introduced it, and the two operations which were made subsequent to his admission to the Wyoming General Hospital found the barbs of the foxtail in the soft parts where the greatest amount of destruction was going on. The removal of these barbs and the aseptic treatment resulted in the repair of the parts, notwithstanding the patient was greatly reduced, and for some four or five days his temperature remained at 94 degrees. His teeth were covered with sordes, and while he was usually a strong, robust young man, he was emaciated to a mere skeleton, but as you will see him when you visit the hospital to-day, he has now become fleshy, all evidence of the general septic infection having disappeared, and now we are simply waiting the repair of the parts. We expect to make a circumcision, which has become necessary owing to the cicatricial contraction induced by the inflammatory change, and after the recovery from the circumcision we intend to make a plastic operation, and if possible restore the urethra. What the result will be in this case remains to be seen.

We all know that this peculiar plant has a very hazardous effect upon stock that eats it, the barbs penetrating not only the soft tissues of the mouth, as well as the bone, but producing large ulcers, followed by necrosis of the bone, and at times when penetrating the intestines of the animal produces death from peritonitis, if not by septic infection when this does not occur. Whether or not this is due to the toxic effect of the plant itself or to its peculiar construction, which favors its passage through the soft and hard parts and carries germs, as has already been stated, I am unable to say, but one thing is certain, that its re-

moval in the case which has just been reported by Dr. Chamberlain has been followed by a speedy and most remarkable recovery from a decidedly typhoid condition with the lowest and longest continued low temperature that I have ever yet seen.

N. B.—Since the meeting of the Wyoming State Medical Society I beg to state that I performed the circumcision on the case, which healed by first intention, and a few days later restored the urethra by a plastic operation whereby we took the skin from either side of the perineal region, allowing the flaps to remain attached to the anterior portion of the pubes, bringing the two flaps together and making the line of suture along the natural position of the raphe. This required us to cut the flap from the ischial region, owing to the cicatricial tissue which we had to deal with in the region of the urethra, and after suturing the lateral edge of the flaps on either side to the cicatricial tissue, which was thoroughly denuded in the hope that we would get adhesions, we sutured the center along the line of the raphe, leaving the denuded surface to granulate. At present writing, a week after the last operation, the patient has not entirely recovered, but the indications are favorable to a complete recovery.

A Text-Book of Mechano-Therapy.—(Massage and Medical Gymnastics.) Especially Prepared for the Use of Medical Students and Trained Nurses. By Axel V. Grafstrom, B.Sc., M.D., late Lieutenant in the Royal Swedish Army, late House Physician, City Hospital, Blackwell's Island, New York. With eleven pen and ink sketches by the author. Philadelphia: W. B. Saunders, 925 Walnut Street. 1899.

This little work consists largely of original articles reprinted from leading medical journals. The subject of massage and joint-movements is presented in a rational and definite manner. The system practiced by the Royal Gymnastic Central Institute, of Stockholm, Sweden, is followed in the main. Special movements are illustrated by special drawings. In addition to the general treatment described, special methods are outlined for the various morbid medical and surgical conditions. Medical practitioners have as a rule rather neglected this important branch of the healing art—to their own disadvantage and to the profit of the so-called osteopaths. This book, though small, will prove of great practical service to its possessors.

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ORIGINAL COMMUNICATIONS.

ACUTE BRONCHO-PNEUMONIA IN CHILDREN.*

By CHARLES PINCKNEY HOUGH, M.D.,

President of the Rocky Mountain Inter-State Medical Association, Member American
Medical Association, Member Association of Military Surgeons of the United
States, Member Medical Association of Montana, Member
State Medical Society of Utah,

Salt Lake City, Utah.

Mr. President and Gentlemen—I will not trespass upon your valuable time with tedious and laborious references to pathological anatomy, physical signs and symptomatology in this most serious and frequent disease, it being a fair presumption that all are informed on those essential points upon which our text-books are quite agreed.

Broncho-pneumonia, usually designated catarrhal pneumonia, is essentially the pneumonia of infancy. It is a bilateral disease, and when fully developed gives scattered areas of dullness on percussion. In this disease we should bear in mind the double circulation of the lungs, that is, the functional and the nutritive, and also remember the pulse-respiration ratio common to infants in health, and as found in pneumonia; this is often the principal diagnostic feature early in the attack that attracts the attention of the observing and wide-awake physician, which, with a high temperature always expected, and circumscribed rales, is good grounds for apprehending this often insidious disease.

Nearly all cases of primary pneumonia in children under two years of age are of this kind, as are nearly all secondary pneumonias during childhood. In the primary affection the mortality is high on account of the age, and in the secondary form on account of the complications to which it is sequela. It is very infrequent after four years of age as a primary disease. Male children seem to be more subject to it, and about 70 per

* Presented to the Wyoming State Medical Society, Rock Springs, Nov. 1, 1898.

cent. of the cases occur in the winter and spring, children with poor hygienic surroundings being most frequently attacked. Exposure to cold and sudden atmospheric changes are still recognized as potent factors in its causation. To this fact I would especially ask your attention; you may protect some precious little ones if you still believe that people catch cold or catch hot, as you may choose to term it. Broncho-pneumonia as a sequela to diphtheria is usually due to the streptococcus infection. In twenty-five cases reported by Netter, in which only one form of bacteria was present, in ten only the pneumococcus was found, in eight only the streptococcus, in five only the staphylococcus, and in two only the Friedlander bacillus. This observation of the different kinds of cocci by the microscope would suggest some factor of irritation preceding their activity.

In primary cases the pneumococcus is nearly always present and in a large per cent. of such cases it occurs alone. The mixed infection is common in secondary cases, while those that show the stertococcus infection are usually the most severe. The cases resembling lobar pneumonia are usually due to the pneumococcus infection.

I think it would be wise if authors and teachers would discard all synonyms in writing and lecturing upon this disease. It would do away with much confusion in the minds of medical men. The more clear our understanding in pathology, the wiser and safer our therapeutics.

The rule is for the catarrhal inflammation to extend from the bronchial tubes to the bronchioles and air vesicles, yet in some cases the disease would appear to begin in the bronchioles and air vesicles at the same time. A very large per cent. of autopsies show very general disease in both lungs; while the pathological process may be arrested at any stage, death may also occur at any stage. Resolution sometimes takes place quickly, but when it is very slow, or only partial, there is likely to be recurring attacks, after which you may have chronic interstitial pneumonia. Pleurisy is almost invariably found over every large area of dullness after the fourth day, while autopsy in cases fatal on or before the third day show that up to that time the pleura is normal or only congested. Large serous effusions are rare in the pleural cavity, the disease is without typical course, while prostration is extreme from the beginning, cyanosis is usually present in some degree and is rarely absent before the fatal issue. Cough may be slight or absent, cerebral symptoms are often quite prominent. Physical signs are often few and slightly marked. Death has been reported within twelve hours after the attack, diagnosis being verified by autopsy. This type of the disease passes for malignant scarlet fever or measles, with sup-

pressed eruption, or possibly as cerebro-spinal meningitis. We should not overlook this serious feature and should always examine the lungs in infants who are taken suddenly ill with embarrassed respiration, cyanosis or cerebral symptoms. The severity of the symptoms in these cases is explained by compression of the air vesicles from the intense engorgement of the tissues almost as much as from the exudates.

The treatment is largely a matter of individual personal experience, influenced for or against the patient in accordance with the good judgment and attention of the mother or nurse, as well as the therapeutic ability of the physician. A close clinical observer once said that in broncho-pneumonia we can do but little for the disease, but much for the patient. This being recognized to be most frequently a secondary pneumonia, we should not overlook the prophylactic measures in those diseases that are chiefly productive of broncho-pneumonia. The nose, mouth and pharynx should command our attention and be kept as clean as possible. The position of the patient should often be changed, and expectoration should be aided and encouraged. Tepid bathing and cold douching is recommended as an efficient agent in preventing broncho-pneumonia, or if it be in the incipient stage, checking its further development. By some the cold pack is preferred. The child should have a large airy room, with an even temperature of not less than seventy. The atmosphere should be kept somewhat moist with vapor. The diet should be nutritious and easily assimilable; the bowels should be freely moved, by preference with calomel. Alcohol or a combination of alcohol and strychnia should be given in sufficient amount to maintain a good heart action. The preparations of ammonia with expectorants, while condemned by some, are generally accepted as being beneficial. It is my custom to irritate the chest with mustard, afterwards freely apply camphorated oil, or simply use camphorated oil and turpentine, covering the chest with flannel or cotton wadding, not changing it until it becomes soiled from the excretions. I never use the oiled silk jacket, as I wish the full benefit of evaporation. I have much faith in diaphoresis in broncho-pneumonia. The kidneys receive my especial care. Since this is not a self-limited disease, and we cannot calculate as to its duration, I would urge especial attention to the diet and drink. A new fad in the diseases of infancy is to rely largely on the latter, to which I give my partial endorsement, believing it to act as an eliminant. As a rule children get too little water, especially when indisposed. I have confidence in quinia as a tonic in combination with ammonia and digitalis. Aconite is an efficient remedy in the acute stage. I am wholly without experience with the cold bath and pack, but frequently resort to the hot mustard

bath in threatened collapse or sinking, and have had from it prompt and happy effect. In reducing the temperature, cold to the head and sponging the face and upper extremities give good results. I have found it quite impossible to adopt in my family practice many highly praised hospital methods, and have believed it good judgment not to try to force methods of external treatment wherein I could not have the full co-operation of the family and the nurse. It is possibly mortifying to confess unfamiliarity with the highly commended antipyretics, the cold bath and the cold pack, but a due regard for truthfulness justifies the statement. When mucus accumulates and the patient cannot expectorate, an emetic of ipecac or alum is beneficial. Strychnia through central stimulation is said to aid expectoration. The alternating of the hot and cold douche is said to be efficient. Frequent cough frees the bronchial tubes, but if it be very annoying, I use small doses of antipyrin or tinct. opii camph. Oxygen gas is by some used with satisfaction, and the inhalation of creosote is said to be good. For extreme nervousness the bromides, antipyrin and phenacetin, are used, while for failing circulation I would commend the hot mustard bath, strychnia, nitro-glycerine, nitrite of amyl, or perhaps atropia of caffeine hypodermically. Good and intelligent nursing and feeding is in my opinion the great essential, and in this particular trouble I place as much confidence in wise and tender motherly care as I do in medication.

THE RADICAL TREATMENT OF DISEASE OF THE HIP-JOINT.*

By CHARLES G. PLUMMER, B.S., M.D.,

Salt Lake City, Utah.

During the past two or three decades we have learned much in the treatment of disease of the hip-joint. Some of our knowledge is the direct result of years of research—yet more has the freshness and newness of the teachings of men of our own age.

The equipment of recent graduates in the theoretical treatment of this class of ailments is immense, but what they lack is the illustrated application. This we call experience. It is that something which we do not attain didactically—it only comes by personal contact.

*Presented at the Second Regular Meeting of the Wyoming State Medical Society, Rock Springs, Wyo., Nov. 2, 1898.

This fact holds equally good with almost any subject we might mention, but it is especially impressed on our minds with reference to surgical procedures. There was a time, and it is not so far in the past that we cannot witness living examples of the fact, when cases of hip-joint disease went unrecognized. I do not say they do not go without recognition to-day—I wish I could. But, with the advent of new ideas, new methods have taught us more of the subject, and now fewer cases are overlooked than at any time in the history of surgery.

So much valuable time is lost in many cases by the diagnosis of rheumatism or “growing pains.” And I am compelled to admit, in deference to those who treat the condition in its early manifestations from that standpoint, that their error seems excusable. For there is quite a similarity, in a general way, in the very early stages of the seizure. But when a diagnosis is made and treatment instituted and maintained, where the cardinal points which go to make up the diagnosis of hip-joint disease are in evidence, the mistake is culpable.

To be sure neurotic reflexes, with symptoms referable to the region of the hip and knee, such as preputial adhesions, anal fissures, or rectal ulcerations, have misled many most excellent men. I believe it is the search for some of these little things wherein lie our most pronounced successes. With their removal, or the elimination of their possible existence, our diagnosis is so much easier. Still, when we take into consideration the fact that the great majority of these cases occur in childhood, or early youth, we may be pardoned when we say we sometimes meet cases wherein a diagnosis is not easy.

Children are so apt to magnify their ailments, they are often so unmanageable and reticent that our diagnosis is almost wholly subjective. It is sometimes impossible to conclude positively that we have morbus coxarius from a single inspection and examination. It will pay us to keep the suspected case under close observation, seeing it perhaps every few days, with instructions to the family to look for certain prominent symptoms, upon which we are to base our conclusions.

We may not observe in any one case all the pathognomonic signs of the disease; still when we see the marked flexion and abduction of the limb, either in the prone or upright position, the limited motion, the apparent ankylosis at the hip, night pains and pains referred to the knee, we cannot miss it much by pronouncing it coxitis. Perhaps the subject has suffered some traumatism—perhaps not—it does not matter, for whatever the cause the treatment is identical.

In coming to the question of treatment, I wish to state that I believe all the successful methods of treating hip-joint

disease today may be termed radical. That there are degrees of radicalism we cannot deny. Looking upon the results of treatment of these cases in the hands of some whom we might term anti-radicals, or extremists in conservatism, I am not much impressed with the wisdom of their medico-supportive and expectant methods. The physician who allows a case to progress so far as to permit of the formation of abscess in or about the region of the hip-joint makes a grave error. And to one who has not seen cases of advanced disease of this joint, he will find that he is totally unable to appreciate the terrific ravages such abscesses will commit. Extensive suppurative sinuses will penetrate the deeper structures of the hip and thigh, extending in some cases down the leg to the knee, forming large, bulging pockets of pus in the popliteal space, or above the patella; or they will burrow underneath the gluteal muscles across to the other side, or come out under Pourpart's ligament, or through the ischio-rectal region. And just as sure as hip joint abscess develops, deformity in some degree may be expected.

My experience has taught me that every deformity, by which I mean modified or absolute ankylosis with shortening resulting, is due either to abscess or neglect, and deferred treatment. Why is such deformity in evidence? Often because of the expectant and medicinal treatment of misguided conservatism.

Do not misunderstand me, please, for I believe in every endeavor to prove the value of conservative measures, but there comes a time when conservatism is not a synonym for good sense, when delay is dangerous, when hesitancy loses the day. For just such cases as these radical surgical procedure is necessitated.

Radical treatment means the institution of active surgical measures, as opposed to the delay, linger and wait methods of the ultra-conservative. My interpretation of radical advances begins with the use of injections of emulsions of iodoform, iodine, or any other drug into or about the joint cavity; or with extension alone; or with extension combined with hypodermatic injections at the site of the disease, or Vaughan's nuclein solution; or with resection of the head of the femur and thorough removal of all evidences of the disease.

I have purposely refrained from saying anything about the etiology of hip-joint disease, for I am certain we are a unit on that subject, if not entirely so, on that of treatment. My reading, and my own experience, convince me that morbus coxarius has its origin in the tubercle bacilli—hence it is merely a circumscribed tuberculosis. It does not matter whether there be a cachexia or not, or whether it result from a traumatism,

I believe the cause always the same. One may not always be able to demonstrate the tubercle bacillus, he cannot find it every time he examines the sputum of a tuberculous subject; nevertheless, the existence of foci of disease, absolutely characteristic in every particular, proves the origin to be one and the same.

While the name of hip-joint disease is used to designate a tubercular inflammation of the hip-joint, it may have its origin in any one of three places: First, on the femur, called epiphyseal; second, acetabular; and third, arthritic, or synovial. If it begins, as is usual in the majority of cases, among children especially, in the epiphysis, the treatment must be more rapidly enforced, and of a much greater degree of severity. For my own convenience, I have divided radical measures into three classes, viz.: First, injections of drugs into or about the joint cavity; second, the employment of extension; third, resection of the head of the femur.

In the first and second classes, as I have already indicated, we may use a combination of methods to suit the exigencies of the case, and to promote the best results. For instance, one would not give intra-articular injections of iodoform emulsion and allow the patient to perform his ordinary duties, because rest is one of the first considerations.

So, with a judicious use of the very best means combined, it becomes our function to save the vast majority of cases from the dreaded fate of the last degree of radical surgical procedure, viz., resection of the hip-joint.

Upon the recognition of a case of hip disease, no matter what the age of the patient, the tripod of success is, first, perfect immobilization with the Thomas splint; second, the prone position; third, extension. Without any other means whatever, I feel confident, in at least 90 per cent. of all cases, of securing the best results when the above rules are strictly adhered to, and intelligently carried out.

With the intra-articular and parenchymatous injection of a 10 per cent. emulsion of iodoform in glycerine, properly sterilized, we get better results than with a similar use of any other of the numerous solutions that have come before the profession. This treatment has been followed some years, but is, properly speaking, one of the weapons of modern surgery. Since the discovery that the tubercle bacilli existed in the so-called cold abscesses and joint affections, its employment has been more a matter of scientific application, with results directly proportionate to the thoroughness with which it is carried out.

Sometimes iodoform intoxication occurs among those who are particularly susceptible, but it is infrequent and rarely of much violence. Nevertheless, in its administration one should

give but from twenty to thirty grains, according to the age of the patient, at the first treatment, and watch the effect. If the patient bears it well, it may be increased to a much larger dosage. After we are satisfied of the existence of disintegrating material, boldly plunge a small, perfectly sterilized canula into the capsule, or the body of the abscess, and draw off all the contents. Leave the canula in position, and with an aseptic rubber tube attached to it, thoroughly irrigate the interior with a warm Thiersch solution, or a 2 to 4 per cent. solution of boric acid. Continue irrigating until the returning solution is perfectly clear, then fill the cavity moderately full of the iodoform emulsion, remove the canula and place over the opening a close aseptic dressing.

The parenchymatous injection is about as effective as the intra-articular, and the same technique is employed.

In the hands of many surgeons balsam Peru, corrosive sublimate, iodine, carbolic acid, and arsenious acid have proven of more or less value in their anti-bacterial action. The violent inflammation set up by the most of these agents is a hindrance to their more general adoption, so that iodoform in glycerine is much more popular. Different operators publish a variety of statistics on the employment of iodoform in this manner, some going so far as to absolutely deny any anti-bacterial action whatever, while others consider it the best and most curative agent in our hands.

As far as I am able to judge of its value in the few cases in which I have used it, I believe it has a definite, germicidal power, depending largely, as a cure, on the stage of the diseased process wherein it is used. True, I have not always found the tubercle bacillus in the gross discharges from such a condition—it is sometimes quite difficult; neither can we always attest the infallibility of the Widal test in typhoid fever; yet, to him who has come in contact with very many representatives of these diseases, the phases are so pertinent that a mistake in diagnosis is improbable. And we are certain, absolutely so, in spite of all the tests, that the above diseases exist, even when their bacilli cannot be demonstrated.

So much for the first method of treatment alone, which may be combined with the second, that of extension, and often to great advantage.

As I have previously declared, the success of treatment by extension depends on perfect immobilization of the affected part, and rest in the prone position, during the acute stages at least. I am unwilling to admit that a patient can do as well with the joint immobilized and be allowed to go about on crutches. The great requisite is rest for the joint, and also for the

tissues enveloping it. No one can be sure of the entire absence of muscular, and even of joint motions, when a patient is in the upright position.

And it is this perfect rest, with separation of the diseased synovial membranes, upon which we base our assumptions for relief and cure.

We know full well how little motion or disturbance can be borne by the sufferer when we attempt to make an examination of the hip-joint without anaesthesia. It does not appear that age makes much difference; from extreme childhood to old age the excruciating agony they endure, upon the slightest motion, goes to show why perfect rest is best.

One of the best means for securing immobility is the Thomas splint, perfectly fitted, applied and maintained. I do not deem it always requisite to use this splint. In adult cases it is not needed as much as among children. When immobilization can not be secured by ordinary bandaging for extension, then the Thomas splint is the best appliance known. Its use should be maintained after the acute stage has passed, and the patient is allowed to go about on crutches, with a patten under the foot of the well leg.

Another most beneficial agent incorporated in the armamentarium of the surgeon for the treatment of this condition is Vaughan's nuclein solution, as produced by Parke, Davis & Co. I have used it in conjunction with extension in a number of cases. In one case, male, aged 44 years, it was not administered hypodermically. I gave him the 5 per cent. solution by the mouth in rapidly increasing doses, until he was taking sixty minims four times daily. From the very beginning an attempt was made to thoroughly saturate him with the nuclein, and the happy results more than repaid us. A rapid decrease in the swelling about the hip-joint took place, the tenderness wholly disappeared, his appetite improved, and there was a complete subsidence of the usual train of annoying symptoms, that rarely in previous cases had been accomplished by extension alone. During the incarceration of this patient's hip-joint he gained over twenty pounds in weight. He had previously undergone amputation of the foot, on the same leg that now suffered from hip disease, for tuberculosis of the ankle.

At the time the extension apparatus was adjusted there were several small tubercular ulcers on the tibia above the stump; hence it was not without misgivings that radical treatment was instituted. And I feel compelled to admit that without such a powerful agent as Vaughan's nuclein solution, producing a vigorous leucocytosis, the result in this case could not have been good. The great increase in the disease-resisting power afforded the

human body by such an element, its germicidal influence and antiseptic properties, recommend it very strongly to our consideration in these cases. Experimenters speak of it very highly also, in cases of mixed infection. Its use, either by the mouth or hypodermatically, is attended by no evil results. I presume I have given nearly 1,000 injections of it, and have had as yet no needle abscess, something one cannot say of all the various anti-toxins we use nowadays.

The third and most extreme measure adopted for the treatment of this disease, resection of the hip-joint, I have found it necessary to employ three times. It is so radical, and the deformity is so marked, that one hesitates to resort to it, often putting off the evil day, until he feels he is not doing the patient or himself justice. Some writers may deem it the only treatment employed that might be termed radical. To be sure, it is the extreme of radicalism, but is demanded in a certain class of cases.

There are degrees of severity of the invasion of the hip-joint by the tubercle bacillus, just as there are of any other diseases with which we come in contact. One type we can treat by a measure as radical as any other, because it singles out the cause and eradicates it; another, by means just as effective and as far-reaching, but perhaps not as brilliant; and a third by the last resort method, the sacrifice of more or less tissues, but the permanent removal of all growth interfering with local and general recovery.

Surgical good sense, for which conservatism is so often used as a synonym, and improperly so, should be the bulwark of every well and properly equipped operator. With a case in hand, one cannot go over the ground and make an operation of selection, for you have something to do other than a mere removal of the head of the femur.

The anatomical relations are so changed that one would scarcely recognize the vicinity, and the attack of the great, bulging, sloughing mass cannot be made upon any hard and fast lines.

The idea is to get to the seat of the trouble as rapidly as possible, and with the loss of as little tissue as is practicable, and, at the same time, be thorough. The simple resection of a practically normal case is nothing compared with what confronts one in a last stage case. The amount of pus that can burrow around the hip and pelvis, and the amount of disintegrated tissue that comes away through a free incision, is astonishing. The removal of all adjacent diseased tissue, and the scraping of all foci, is secondary to the rapid and careful resection of the head of the bone. Remove all signs of disease, but leave all the bone

that it is possible to leave. In doing the section, leave the great trochanter, if possible; if it must be sacrificed, saw through it just above the lesser trochanter at an angle, thus maintaining the integrity of the muscular attachment for the great muscles of the thigh.

Notwithstanding the deformity which must result from the removal of such an important factor, it is neither as great nor as maiming as that which follows the usual suppurative processes involving the hip-joint, when allowed to heal by natural resolution.

Resection presents the horrors of an operation to patient and relatives. It also guarantees speedy and permanent relief from pain, but a permanent shortening. This shortening may be much or little, many times depending on the attending surgeon in his removal of tissue, also in his after treatment and care of the case.

If the case be young, we have every reason to believe that there will be a continuation of the growth of the femur, thus modifying more or less the permanent shortening.

In my experience, those who have endured this operation are lame only from the shortening. While in the result of a spontaneous cure, a very aggravating ankylosis and tilting of the pelvis accompanies it, with even a greater amount of shortening.

Much more might be said on this subject, cases could be cited of the various methods of treatment, and details pursued, but it is not pertinent at this time. I am satisfied that not all is accomplished by radical measures that should be expected. Still, with the improved methods at our hands, the greater knowledge of cause and effect, we may hope to accomplish much more than has ever before rewarded our efforts.

RESPONSE TO THE ADDRESS OF WELCOME.

Delivered at the Omaha Meeting of the Western Surgical and Gynecological Association, Dec. 28th, 1898.

By H. D. NILES, M.D.,
Salt Lake City, Utah.

Mr. President, Ladies and Gentlemen—In behalf of the Western Surgical and Gynecological Association, I desire to thank the good citizens of Omaha and the distinguished gentleman who has so eloquently voiced their kindly sentiments, for their warm welcome and cordial greeting. From the time of our

acceptance of your invitation to visit your lovely city, we have looked forward with pleasant anticipations to this meeting, and your reception this morning assures us that these anticipations are to be realized. But it is not alone this spirit of hospitality that attracts us to this metropolis. The fame of your wonderful city with its commercial strength, great resources, and its superb attractions, has long since reached our ears and agreeably engaged our thoughts. Your latest and perhaps your greatest achievement, "The Exposition," so successfully accomplished, in the face of such a combination of adverse circumstances and trying conditions as would have appalled a management less energetic, resourceful and enterprising, has demonstrated to the world the character of your people and revealed the real secret of your prosperity. We, therefore, have held and still hold in high esteem this opportunity your courtesy grants us of knowing more of your city and its people, and one of the delights of our brief sojourn among you will be the enjoyment of this privilege, so far as time and opportunity permit.

As I scan the people who make up this audience, I observe a goodly number, who, from their intelligent and distinguished appearance I infer are not doctors. To these, and if it were possible through these, to the public generally, I should like to say that we hail with delight this and all other manifestations of your interest in our work. We are in greater need of your aid, encouragement and co-operation now than at any time in the history of medicine. As the great problems of sanitation, hygiene, preventive medicine and the suppression of charlatanism are undergoing a gradual but none the less certain solution; as the results of our labors, researches, studies and experiences are evolving newer and better means of combatting disease, preserving and restoring health; just as we are about to present to you the greatest triumphs of our highest endeavors, we find ourselves confronted by an obstacle which you alone can remove, viz., an apathetic and unwilling public. With the remedy at hand, needing only your help to apply it, we are forced to passively wait your delayed action, while we remain unwilling witnesses to more sufferings and deaths from preventible causes than are produced by war or famine. We need more than your kind words, we need your intelligent assistance and active co-operation. Should the good people of Omaha, usually so quick to get into touch with the progressive spirit of the age, be the first to enlist in this cause of humanity, a greater and more enduring fame awaits your city than can be achieved by any exhibition of public spirit or benevolent enterprise.

I am further intrusted by the visiting members of this association with the pleasing task of expressing to the chairman

of the local committee of arrangements and his associates our grateful appreciation of their efforts to make our stay here both pleasant and profitable. The good Lord seems to have especially endowed them for this occasion, and through their courteous attentions we have already been made to feel that we are not "strangers in a strange land," but favored guests in the home of friends.

In conclusion I desire to say to those who are interested in our work and welfare that we shall strive not to be over tempted by these manifold allurements that kind friends have surrounded us with, and led to forget the higher aims of this association, and we trust and believe that our more serious deliberations will be marked by such an earnestness of purpose and such a spirit of investigation, combined with fairness and good judgment, as to ensure to this Omaha meeting its full measure of good results that shall be alike gratifying to us and to those who are in sympathy with us and our labors.

PRESIDENT'S ADDRESS.

Presented to the Utah State Medical Society, at the Fourth Annual Meeting, Held at Salt Lake City, Utah, Oct. 6-7, 1898.

By SALATHIEL EWING, M.D.,
Salt Lake City, Utah.

"One year has slipped, like hour-glass sands,
That mark the passing of our life away;
And once again we meet [as thrice] before
We've met, to work, to pray."

Fellows—Let me first of all, again express my keen appreciation for favors received at your hands, and once more assure you that I am truly alive to the value of the worth of your confidence and good will, in calling me one year ago to stand at the head of this young and vigorous society and preside over your deliberations. My heart responds to your kindness, with a longing desire to always show a proper estimate of your regard, and to requite it if possible.

The themes for a president's address before a medical society are as boundless as the field of human thought. In casting about for a topic for a formal address on this occasion, I first essayed to write a paper on a purely medical theme. But there will be many papers in that line presented at this session, and discussed with more learning and ability than belong to me. So abandoning the idea of a formal discourse, I will simply make

a little talk, giving expression to a few thoughts that come flitting athwart our mind in the silence of the midnight hour, and throw them out for your consideration.

The year 1898 has been an eventful year, fraught and laden with outcomes of momentous import, not only to our own ever dear and beloved country, but to the entire civilized and uncivilized world.

It is peculiarly the mission of the physician, owing to his environments and the mental and physical education he daily obtains by instruction, training and discipline, that naturally and surely causes him to carefully note and ponder over every event and episode in history, and utilize every occurrence to glorify God and better the condition and elevate the character of his fellow-man. Let us, before we partake of the scientific menu our faithful and efficient executive committee have prepared for us, casually call to remembrance only one or two incidents that have loomed up in this eventful year, that are of special interest to the profession of Utah. And in our solitary moments may we, with the hundreds of other happenings, call them to mind, and using them as object lessons they shall be aids to us in formulating plans whereby we may unitedly and successfully carry out our designs for the amelioration of the conditions and for the beautifying and happyfying the lives of the human race.

We all have noted and given grateful attention to the meeting of the American Medical Association at Denver last June. And all who participated will ever have pleasant remembrances of new acquaintances formed, of the able and scientific discussions we listened to by some of our most learned and practical men in the land. And the superb and inimitable manner in which we were entertained by the generous and kindly Denverites. It is noticeable to the most casual observer that the American Medical Association is the center of medical activity and energy in the land. Thus we see at the Denver meeting a number of satellites attending and revolving around this powerful center. There was the American Academy of Medicine, the American Publishers' Association, the Association of American Medical Colleges, the American Medical Temperance Association and the National Confederation of State Medical Examining and Licensing Boards, and what was of deep import to this entire intermountain region was the organization of the Rocky Mountain Inter-State Medical Association. "All connected with the advancement of science, the improvement of the physical condition of the country, the elevation of professional and general hygienic education, the enactment of enlightened sanitary laws and similar aims." Twenty-three delegates from Utah were present and

shared an honorable part in this concentration of medical interest.

Let us hope that at no distant day every member of the Utah society will avail himself of the blessed privilege of becoming a permanent member of the American Association and identifying his interests with one or more of its numerous sections. For be it known, "the beneficent influences which medical men can exert on their fellow-men can only be secured in its highest degree by combination and co-operation."

The medical profession of this country is swiftly and surely coming to the front, to take its proper and well-earned, dignified position in the councils of the nation. We most earnestly recommend to the profession throughout the state to at once, in each county, organize a county medical society, even if you can muster but a half-dozen doctors, and can only fraternize twice a year, it will be of inestimable value to you and the community where you reside. And every physician who is a lover of this commonwealth should avail himself of the blessed privilege of becoming an active working member of and rendering his first allegiance to the state society, that we may present a solid front for the dignity and standing of the medical profession of this, the youngest and fairest state in the Union. Being thus thoroughly and harmoniously organized in the state society, we will be prepared to successfully combat vicious legislation, not only in our own state but in the nation as well. For example, witness the surreptitious manner in which the advocates of the anti-vivisection bill tried to "block the wheels of progress by handicapping physiologic and therapeutic experimentations," thus making further advancement in knowledge out of the question. How keenly the entire scientific world felt the diabolical misrepresentations of these dark-age obstructionists. Witness the prompt and timely efforts of our executive committee in memorializing our senators and congressman, calling their attention to the facts in the case, asking them in the name of humanity and statesmanship to work and vote against the Gallinger bill. And today we are proud to put on record, and at the same time acknowledge our gratitude and award a due meed of praise from the entire medical profession and all other scientific bodies of the nation for the loyal and statesmanlike manner in which our senators and congressman came to our rescue and promised to labor and vote against the obnoxious bill, should it be pressed to an issue. All honor to the three honorable gentlemen, who in this most trying moment for the weal or woe of our nation, were not politicians, but true American statesmen. And today the Utah State Medical Society is justifiable in felicitating herself that she stands second to no medical or other scientific body

in the land in activity, energy and loyalty to everything that is for the advancement and betterment of the human race. Our state society, in its organized capacity and all physicians personally, must ever be on the alert to defeat such criminal and similar vicious legislation. Another work before us requiring our attention during the Fifty-sixth Congress will be to put forth every effort to defeat the Caffery bill, and do away with this clap-trap Marine Hospital Bureau extension, and inaugurate a Commission of Public Health.

This is the great desideratum in order that we may keep up the investigation of disease and utilize the best means for its prevention. The health of the people is the indispensable upon which all our happiness, all our prosperity, all our power and usefulness as a state depend. Ah! then should the profession enter the arena of politics? Yea, verily; for of all men the physician is his brother's keeper. And we must not let sleep come to our eyes nor slumber to our eyelids until the time shall come when no man shall dare let his head pop up as a candidate for office where legislation is concerned, from the smallest municipality to the highest councils of our nation, who is not a thorough convert to, and will labor and vote for all special measures for the preservation of health and the prevention of disease, as to the nation, communities and individuals, and make special and liberal appropriations to successfully carry on the work.

And now, in the face of living events that confront us in this year of stupendous happenings, it is right and proper that this society, at its annual meeting, recognize a few of the important occurrences and events of the year and assert our loyalty to the government, of which the medical profession form such an important factor. For instance, the year 1898 gave us the first war Congress for over a quarter of a century. April 25th, declaration of war, purely in the cause of down-trodden and outraged humanity. That presaged the end of Spanish power. Then there was the Hawaiian annexation, which was the first step in a new national career among the people of the earth. The revenue measure growing out of the war. The organization of the great volunteer army of the best boys in the land. These are only a few of the acts that appealed to the patriotism and business sense of this war Congress, all without friction and the minimum of partisan feeling. The people of every state and hamlet in the Union stood shoulder to shoulder, all looking, praying and working to one end, the cause of humanity.

Our country has not been so united and harmonious in all this century. Among other important events, not mentioned, occurring in the year 1898 is the addition to Uncle Sam's domains of Cuba, Puerto Rico, Philippines, the most important colonial

possession of Spain, and the Ladrone islands. Now, the great heart-beat of our nation is for the betterment of the whole human race, and our hearts' desire is for a permanent peace with a lasting sense of honor. And we must fully carry out the principles upon which this war was designed and prosecuted, always keeping in remembrance that peace purchased by parting with principle is profanity. And as proud and appreciative members of the Utah State Medical Society, we feel in duty bound to add our testimony that we stand firm as true patriots, and upon any and every occasion will raise our voice and our hands to uphold America, American principles and institutions. And whether native born or adopted citizens of the state, "we are true sons of the soil, and as Americans in fact, bow to no one but our God." And it is peculiarly fitting on this occasion for the state society to commemorate and perpetuate the names of all patriots of our nation, from Lexington down to Manila, who stood firm and true by service and sacrifice; always gratefully remembering that every soldier from the moment he enlisted took his life in his hand for the preservation of his country, whether he ever was engaged in a battle or not. In so doing we catch the inspiration and strengthen the magnetism of deep devotion and consecration and deep, undying love and loyalty to our country and our country's flag. And today we feel inspired to say we will ever keep Old Glory at the head of the mast, ever love, honor and defend her as the symbol of the best government the world ever knew, the federal government of the United States of America, which is a compacted covenant entered into between the different states, district and territories of the Union, reserving only a subordinate and limited sovereignty. And today we send greeting to President McKinley and the government at Washington that the doctors from all over the great state of Utah, Utah, home on the mountain top, in their annual session, pause for a moment from scientific investigation to signify our loyalty and pledge our lives and our sacred honor to defend the government the stars and stripes represent from any and all encroachments and dictation from any foreign power; we pledge ourselves not to allow any sentiments of state rights, squatter sovereignty, anarchism, communism, or any other ism, except pure Americanism for one moment to have a resting place within the domain and beneath its starry folds. We pledge ourselves to denounce even the appearance of the union of church and state. We pledge ourselves to the utmost of our ability to forever support and uphold the public schools of our country, believing, with the martyred Garfield, that we must confront the dangers of suffrage with the blessings of universal education. The ipse dixit of John A. Dix, "Whoever attempts to pull

down the American flag, shoot him on the spot," we will forever keep ringing down the ages through eternity. We will forever keep singing "Rally Round the Flag, Boys," and will ever hail with delight Old Glory, the symbol of liberty, free speech, free press, equal justice to all, which has been christened and baptized in the best and purest blood the world ever knew.

We will forever march beneath her starry folds, keep her triumphantly waving o'er our heads, gallantly marching down to the end of our existence, leaving behind us the request that our bodies be buried beneath the clods of the valley to the tune of the "Star Spangled Banner," and "Nearer, My God, to Thee."

SMALL POX, OR VARIOLA.

By FRANK PRINCE, M.D.,

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Small pox, or variola, has attracted the attention of the world ever since the Hegira. Previous to this little is known of it in the world's history. The year that Mahomet was born there was a terrible scourge, very deadly in its effect, that visited the then known world, but its origin was never ascertained.

The first notice of a plague, that exhibited features of small pox, is to be found in the historical writings of Procopius (D. E. Bello Gathico) Book 2nd. This author flourished during the reign of Justinian the First. The epidemic was at Pelusium, in Egypt, from which place it spread to Constantinople A. D. 544. This was close to the time given by medical history, or A. D. 569, the year when Mahomet was born. It was at this time that Abraham, the viceroy, led the Abyssinian army to the gates of Mecca and was compelled to retreat on account of the breaking out of small pox and its terrible mortality among the troops. Then we hear of it again in the silent records of Arabia in the year, A. D. 622, when Mahomet gathered together the wandering tribes of Arabia, and as prophet and conqueror, made war upon the nations around him.

The first author in medical history who treats of small pox specially, was a physician by the name of Rhazes, who lived at Bagdad about the beginning of the Tenth century. Moore's History of Small Pox refers to many plagues, long prior to this time, and claims that they were small pox. This claim is not founded on genuine facts or relics of other centuries, that could be relied upon, and was not accepted by the medical world. Rhazes, in his

treatise on small pox, speaks of his predecessors, and among them of Ahren, a physician of Alexandria, who lived about the year 622, the time of Mahomet's terrible visitation upon the nations around him. Physicians, at that day, considered measles as billious small pox. There were many noted physicians of Arabia who flourished about this time, among them were Haly-Abas and Avicenna. These all believed in the contagion of small pox, and that it was generated by a germ or toxic substance entering the humours, as termed in that day, and in their treatment used both blisters and blood-letting. They also believed in the occasional occurrence of small pox twice in the same subject. We are led to believe, from historians, that small pox reached England about the beginning of the Ninth Century, and there is preserved in the British Museum an Anglo-Saxon manuscript, written in that century, containing an exorcism against small pox. This you will find in Moore's History of Small Pox. As our time is limited, we turn to the Sixteenth Century.

There was at this time such a thing as humoeral doctrines taught in all the schools, and the patient of pestilentia or malignant diseases, was put through a hot steaming course of treatment, the great object being to expel the "toxicous humors" through perspiration. Through the ages of which we have written, the world, as it exists at present, was not known. Until America was discovered by Columbus, the Indian roamed at will, killed his game, and slew his foe for the pleasure alone of carrying his scalp dangling from his belt; but the discovery of America, while it extended the bounds of human knowledge, carried such desolation to peaceful homes that the heart sickens at its contemplation. Firewater was exchanged for tobacco, and two of the greatest curses successfully introduced into the world. But the savage received as boot, or a difference, the introduction of small pox. It killed its thousands, and we see it stated, on the authority of the Spanish histories, in that a very short time after its introduction into Mexico, three and one-half millions of her people were destroyed by it. We have often heard of Mexican itch, as a diagnosis of disease, by parties who ought to know better, but are ignorant of the origin of the term. When the small pox for so many years destroyed so many Mexicans it was called Mexican itch by the common masses of the common people, and on account of this Mexican itch people would not go beyond the boundary lines. Since that date America has never, at any time, been entirely free from this disease somewhere within her boundaries; it has existed, and it has found a permanent home. 'Twas a great infliction upon the world, and the medical profession, especially when the slaves of the South were made

free men. From a medical standpoint it was a terrible curse imposed upon the people. Of all human beings, they are the most indifferent and fearless of disease. For the want of education and want of judgment and discretion, they will visit any patient afflicted with the most deadly malady from the desire to "see what it looks like." In this way, they become the best medium, or communication, or transportation of all malignant diseases. To-day syphilis, etc., is one thousand times more prevalent among them than when they were slaves. With the exception of many good men among them, they know no moral law, and are strictly obedient to appetite and passion. Curiosity is one of their leading characteristics. They have no fear of death until it is on them. To-day I venture the assertion that there are ten negroes to one white person with small pox in the United States.

This brings us down to our own time and our own home. For four years we have been in close proximity to small pox. The negroes have been passing to and from the logging camps on the Mississippi river and its western tributaries. In 1895 a large lot of convalescent small pox cases were shipped from these camps to Birmingham. About thirty-one of these stopped off the train in Bessemer. I was notified by a policeman, and I found them, many of them in a state of maturation of pustules, filthy and dirty, with about twenty Bessemer negroes around them. I placed them in quarantine, and ordered that they be returned to Birmingham on next dummy. But the mayor anticipated my movement and hurried them to the next station, placed them on the down train, and sent them on south. From this time I have not the least doubt that Birmingham got her scourge of small pox, and Bessemer borrowed hers from Birmingham.

We read many things interesting theoretically in regard to small pox, written by men who never treated a case and, perhaps, never saw one. But this is like many other opinions expressed by individual physicians and boards of health, who are far away from the battle ground in regard to infection, contagion and quarantine. And when a virulent, or malignant fever or disease comes, these are the first to take wings and go off with the dear people who are fleeing from danger. But the doctor who stands in the very center of the battle and does valiant service all through the epidemic, must not dare to differ with them, lest he be charged with arrogance and presumption, though he has had positive demonstration contrary to their promulgated opinion. (For instance, we know that in the past history of our country there were epidemics of yellow fever in Boston, New York and Philadelphia. And now 'tis said that the disease can-

not spread or become epidemic in any country above certain degrees of latitude. Has yellow fever changed in its character, its virulence, or even its symptoms? Is it not the same to-day that it was when epidemic in New York? Then why does it not take the Atlantic coast as it did in years gone by? A question that is not difficult to answer. There lived in other days men like Jerbome Cockran, who made sanitation and quarantine regulations their chief study for years, and the results of their investigations led to the adoption of such regulations as to entirely exclude from certain ports of entry yellow fever, small pox, and kindred diseases. Barriers have been erected that these diseases cannot pass. I mean quarantine officers, detention camps, etc.) After being with these as I have been in the past, one fact has been very forcibly impressed upon my mind in regard to small pox, yellow fever, etc., that is, keep away from them and keep them away from you, and you will never have them. There is a subtle influence emanating from them, you may call it germs, or toxic substance, or anything else you please, but don't come in contact with it. While I believe that vaccination is, to a great degree, effective, I do not attribute to it positive immunizing properties. Some of the worst cases I had to treat in the hospital, between the months of July, 1897, and March, 1898, had been very thoroughly vaccinated and had large vaccine scabs and sores on the arm, while the attack was very malignant. Isolation deserves a great deal of credit in preventing, as well as stamping out the disease. Withdraw every element upon which it feeds and it will die. Revaccination, where it has been successful at the first and left a good scar, is an imposition upon any one, and often fraught with much danger. A moment's reflection will teach us that this is one of the best ways of introducing tubercle-diseases that could be invented. I was vaccinated over fifty years ago. I was with this disease every day, and over an hour many days in the hospital with closed doors where there were over fifty cases in all stages of the disease. This, for months, and I did not take it.

About July 4th a man was brought to me by Dr. L——, whose case was one of small pox, but mild. The initial fever had passed and pustules were making their appearance on the forehead and cheeks. I diagnosed this a case of small pox, and by so doing created considerable excitement. But excitement was somewhat abated by putting the case in a pest house entirely out of the city limits. Physicians, who never saw a case of small pox and never saw this patient, decided that I was mistaken. This man had been vaccinated, and his was truly a case of varioloid. My next was a very malignant case of confluent small pox,

full and complete. I made it a special duty to invite different physicians to visit the case with me. I told them I had a vacant seat in my buggy, and invited them to occupy it, but every one but two, had important business in another direction. Just at this point is where the greatest difficulty in preventing an epidemic comes in. Unfortunately there arises a diversity of opinion, and no unity of action. Many physicians form their opinions a mile away from the patient whom they have never seen, issue a voluntary diagnosis, often replete with unpleasant insinuations of a health officer, instead of going to his assistance and doing all he can to stamp out the disease. In all cases where there is danger, it is best to keep on the safe side, for, if a mistake has been made by a health officer, it would not injure any one but himself. But reverse it, and let the wrong diagnosis come from the other side, and trouble might be the consequences. Sustain your health officer and help him fight the battle for the honor of the profession and the safety of the people. Gallant soldiers are the noblest supporters of a country's liberty. They can face an enemy and stand with the bullets whistling around them from the enemy that they can see—they can charge a battery even to the cannon's mouth; but a braver man than these is the man who takes his life in his own hands and fights for the life of his patient with a foe he cannot see, and whose boon alone is death.

Charles ———, a colored man about 21 years of age, was brought to me. In the center of his forehead was one conical pimple of peculiar shape, conical with three divisions. He had already passed the initial fever. There was a sharp top, below a thin watery fluid, and still below this, at this stage, a yellow tinge at base. On the left cheek were a half dozen pimples of same character. This man's case was a case of varioloid, he having been vaccinated years before the attack.

John B——'s case was a malignant case of confluent small pox. The first symptom that manifested itself in his case was a bronchial catarrh, followed by sore throat, suffused eyes, severe headache, and then violent fever for four days. As soon as the fever subsided the eruption began to show itself. First by one or two conical pimples in the forehead, then on the cheeks, then on the inside of forearm, then on the chest, and continued on down to the bottom of the feet. On the fourth day after the first pimple made its appearance, the face was very much swollen, skin thickened, eyes almost completely hidden by the mass of pimples that ran into each other, and looked more like a swarm of bees settled upon a limb of a tree than anything else. This went on down in the branches, covering body, legs and feet,

when the man was completely buried in this mass of pustules. By the second day after the pimples had shown themselves, there was collected under each point a thin white watery fluid, and by the seventh day there was found at the bottom of this fluid a yellow purulent matter, making a third division in that one pimple. That is a point. Here begins the stage of maturation, in which we have the secondary fever of small pox, and here is the danger line to be crossed. Woe to the man whose system is already filled with syphilis and also to the man who is habituated to strong drink, or *relirium tremens*. Just here comes up all the complications, and every organ must be closely watched and kept as near as possible in normal condition—more especially the heart and kidneys. *Variola maligna* comes in here, where the vital organs are involved. This may occur in a discrete case, as well as in a confluent. The blood that is thrown off in hemorrhages is black and thickened from pustules lining the arteries, veins, or from too much poison in the blood, I know not. In some cases the brain goes wild, the heart rebels and almost ceases to beat, and the kidneys obey no order and slowly pass thickened dark bloody urine and often don't act at all.

One fact has been clearly demonstrated in this experience, and that is that the men suffer in the malignant eruptive stage more than the women, and the boys suffer more than the girls. The man who is black is more liable to *variola maligna* than others. The brown-skinned man suffers less than others. The white negro suffers nearly as much as the black. All other colors suffer alike. All are liable to heart failure. The majority of cases are not much sick, fever light, eruption scattered, no loss of appetite. All the members of the same family do not suffer alike; some very sick, others not much sick. The prognosis of this disease has always been regarded as very grave and the disease, by its presence in any community, carries with it dread and alarm greatly magnified by imagination. I am compelled to regard the progress and results of this disease as favorable. In this epidemic at Bessemer we had over two hundred cases. I treated 143 cases in the hospital of colored patients, and 17 cases outside of white persons, and of this number I lost only one. This one died from paralysis caused by excessive drinking of water, contrary to my orders. The disease was here in all its complications. There were cases of pneumonia, violent nephritis, meningitis, hemorrhage from lungs, and bowels and kidneys and heart trouble. These complications caused me to designate such cases as *variola maglin*. Then we have discrete, confluent and malignant small pox.

TREATMENT.

Good nursing, close watching and correct diagnosis, positively required. From the commencement of the attack I give my patient at least $\frac{3}{4}$ of rye whiskey every four hours, and more if demanded. I also have the patient well greased all over with olive oil calcinated with aqua calcis. Where the burning and itching is troublesome, this gives instant relief. I used this in every form of the disease, from the initial fever until desquamation was complete. When the heart is acting very slowly and is intermitting, I give strychnine internally or hypodermically, and sometimes, when fever is very high, combined with aconitine digitalin or gloenoin or strophanthus. When the kidneys are sluggish and don't act at all, I use digitalis, nux vomica and sanmetto, and when blood is passing from kidneys, I use ergot, belladonna and opium. This is good in all hemorrhages. When complicated with meningitis, fluid ext. ergot and iodide potassa. All complications must be recognized at once and speedily treated. In hemorrhage of the bowels I use gum opium—sulphocarbonate of zinc and acetate of lead. There are no two cases of small pox alike, and desquamation does not have any special time to begin. But no case should be discharged until there is complete desquamation. It has been said the last place to part with the scab is the foot. This is a mistake. The last place is the angle between the eye and the nose, and the cheek. When the stage of maturation is completed and the scabs have dried, then desquamation begins, on the face, on the arms, on the legs, body, and last on the angle between the eye, nose and cheek. One special characteristic of small pox is that it always begins on the forehead and scalp and goes down. It never begins on any other portion of the body and goes up.

When in hospital, I had on a change of clothes—pants and coat—and my face and hands wet with chloride of soda. This was also put on my clothing. In fumigating a room, I used tar and sulphur, and disinfected with hyd. bi-chloride. When a patient was discharged, I had him stripped and washed with hot water and soap, and rubbed over with bi-chloride water, and new clothes complete, and his old clothes burned. When the scabs leave the negro he is white spotted, and when they leave the white man he is red spotted, but all soon regain natural color.

We feel that there should be some plan adopted by every community, where small pox exists, to exterminate this most filthy of all diseases. There is none more effectual than complete isolation—vaccination does not accomplish it. Some of the most virulent cases of the epidemic had been vaccinated, and when stripped to be washed and discharged, they had large vaccine

scabs or sores on their arms. In no case where it has been checked was it done by vaccination alone, but in every place the cases of small pox were taken by inspectors and carried to camps and no one was permitted to visit them until they were discharged. Without this concentration of all cases in camps, vaccination would have accomplished but little.

RESPIRATORY TRACT IN YOUNG CHILDREN.

By N. G. WOODWORTH, M.D.,
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If there is one disease more than another which taxes the judgment and skill of the physician, and one whose treatment he undertakes with more misgiving, it is that involving the respiratory tract in young children, such as bronchitis and catarrhal pneumonia.

In the treatment of these diseases there is one rule which I follow with an inflexible determination, and that is that I invariably insist upon a thermometer being hung up in the room so the temperature may be maintained at a given standard without any guess work. I have followed this rule for over two years and feel wonderfully rewarded by its careful observation. I believe I can confidently say that if I were to retain but one therapeutic measure in the treatment of these diseases, and discard every other, I would take the thermometer. I am fully satisfied that compound your prescriptions skillfully as you may and apply your poultices, cotton and oiled silk as you please, you will be rewarded with poor success if the temperature of the room is not maintained at a given point. I have observed a variation of from five to ten degrees within a few hours where the thermometer is not to be had. The feelings of the attendant are no safe guide by which to govern the temperature in the room. By placing a thermometer in the room you at the same time place upon the nurse or attendant a grave responsibility; a neglect of which renders her plainly culpable for any unfavorable termination of the case.

Since I have been following out this plan I find it a pleasure to treat acute diseases of the respiratory tract. Did I say acute diseases? I find it likewise absolutely indispensable where these diseases assume the form of chronicity. Before adopting this plan I always undertook the treatment with not a little misgiving because I attributed death, if death came, possibly it was some dereliction or failure on my part to do the most that could be done.

PRACTICAL CHLOROFORM ANAESTHESIA.

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So much has already been written upon this well-worn subject that it seems superfluous to add any more. If, however, any new point or points in the administration of chloroform can be adduced, sufficient justification for an article like the present exists.

Whether the altitude of Colorado renders the administration safer than that of sea level is a debatable question; certain it is that surgeons and physicians who come from the East, strongly prejudiced against chloroform, are converted to its use after witnessing its administration in a great number of successive cases without any alarming results.

For five years I have administered chloroform for physicians and surgeons, part of the time during hospital interne service, and thus far have been fortunate enough not to have had a death which could be attributed to the anaesthetic; in fact, I cannot recall more than two or three cases that manifested any alarming signs of danger. Among those to whom chloroform was given, with no untoward results, were cases of damaged hearts, pulmonary tuberculosis and other serious organic affections. If asked for the proper method of giving chloroform, an epigrammatic answer would be, Give it, and were it not for the occasional serious results of chloroform administration, the advice given might be the best to pursue. It is difficult, indeed, to lay down iron-bound rules for the proper production of anaesthesia; the personal equation in the anaesthetist and the patient plays such an important part that I am almost tempted to say, as it is said of accouchements, "each is a law unto itself." There are, however, certain principles that can be laid down, a marked deviation from which is certainly to be deprecated, if not condemned.

In a previous article upon the "Relations of the Operator to the Anaesthetist," published in the New York Medical Record, February 12, 1898, I dwelt upon the importance of the selection of the anaesthetist, advocating special training for this important position. Having been once selected—unless he be a novice—his work should be unhampered by any suggestions of the operator or bystanders. This I wish to emphasize as one of the important features in the successful administration of an anaesthetic. The

anaesthetist having been called to administer the chloroform, he should be introduced to the patient by the surgeon or physician in charge. It is a good plan for him to be left alone with the patient, although some one should be conveniently near in case of need. With female patients it is probably best to have some one else in the room, owing to erotic dreams which the anaesthetic sometimes occasions, and in that case it is better that the third person's presence be unknown to the patient.

The anaesthetist should come prepared for any emergency. His tools should consist of an Esmarck inhaler or similar device, bottle containing fresh chloroform, with the cork so cut as to allow the dropping of the chloroform readily drop by drop. It is important that the chloroform be obtained from a recently opened bottle, in which there has been no air, since in long contact with air chloroform undergoes a chemic change, liberating chlorine, which is irritating to the air passages. He should also have close at hand: Hypodermic syringe, tablets of strychnine, atropine, digitalin, nitro-glycerine, and pearls of nitrite of amyl. Tongue forceps, applicator with cotton swab and some instrument with which the jaws can be pried open, complete his armamentarium. All these instruments are of course not required in every case of anaesthesia, nor are all the drugs necessary, strychnine alone sufficing, but, as the unexpected sometimes happens, it is better to be prepared. After the introduction to the patient the anaesthetist should converse with him, obtaining history of previous ailments, especially as to rheumatism; ask whether the patient has ever previously taken chloroform; explain what is expected of him in order to attain the desired result and the needlessness of fear; that at first there may be a slight feeling of weight upon the chest, which would soon pass off. Learn if the patient has artificial teeth; if so, remove them; examine tonsils, pharynx and heart (examination of the urine having already been made and the result given to the anaesthetist by the physician in charge). Food should be withheld from the patient for three or four hours preceding the time set for the operation. It is best that the drinking of water be refrained from during the hour before. These precautions are necessary in order to reduce to a minimum the occurrence of vomiting.

Apply vaseline or cosmoline in a thin layer in the anterior nares, over nose, around the mouth and upon the chin.

The patient should then be freed from any restriction binding the neck, chest or abdomen and instructed to breathe quietly.

In the beginning of the anaesthesia it is my plan to have the patient's head and shoulders raised with pillows; this produces some anaemia of the brain and facilitates anaesthesia. Later the pillows must be removed so that the patient's head

is on the same level with the rest of the body. See that the patient has stockings on his feet and that he is warmly enveloped in a blanket until the operator is ready to begin, when only the field of operation is to be exposed. The shock of a severe operation is often increased by neglect of this precaution.

These preliminaries having been arranged, the mask is placed over the nose and mouth of the patient, who is instructed to close his eyes and attempt to go to sleep. Perfect quiet is to be maintained in the room. Having watched the patient for a minute or so, the bottle containing the chloroform is removed from the vest pocket, where it has been conveniently placed, and the dropping of the anaesthetic begun. If the patient has been lulled into a feeling of security, no perceptible difference will occur in his breathing during the administration of the first few drops of chloroform. If he is somewhat nervous or slightly under the influence of alcohol, he may breathe deeply or he may throw up his hands and try to brush the mask from his face, or he may cough or complain of being suffocated, in which case the mask may be raised slightly from the face, but the dropping continued and the patient reassured.

How often do we hear doctors tell their patients to breathe deeply during the initial stage of anaesthesia, and herein lies a great danger, and a common cause of the troubles which so frequently accompany anaesthesia. As often have I seen otherwise good physicians pour chloroform upon the mask until saturated and then put it over the patient's nose and mouth, and with what results it is unnecessary to mention. After the patient has been breathing the chloroform for a few minutes he should be told to breathe deeply, and this instruction should be given in a firm, clear tone. It is unnecessary to shout at the patient if he fails to obey and continues shallow breathing; intermittent and firm pressure over the lower end of the sternum will invariably be rewarded by the desired result. Having continued the dropping slowly for two or three minutes, or until stage of excitement develops, the frequency of the dropping should be increased, in order to shorten this usually distressing stage, and at the same time prevent the occurrence of vomiting. When vomiting does occur during the administration of the anaesthetic, before the operation has commenced, many anaesthetists crowd the anaesthetic in order to paralyze the reflexes and thus cut short the vomiting. I do not favor this method, because the patient will get rid of what has been temporarily checked by the crowding of the chloroform, when he comes out from under the effects, and often the vomiting becomes persistent and almost uncontrollable, as a result of so doing; but prefer to remove the

mask for a minute, and clear the patient's mouth and throat of all vomited matter.

The beginning of complete narcosis is ordinarily heralded by deep and regular breathing of the patient; and this should be the signal to lessen the frequency of the dropping. From now on until the end of the operation, the attitude of the anaesthetist should be one of extreme watchfulness. The head of the patient should be turned upon one side, and the fingers of the left hand held behind the angle of the jaw, and the jaw pushed forward so as to keep the entrance of the larynx free from any obstruction. The dropping is to be continued at regular intervals. Upon the slightest signs of danger—such as marked cyanosis, stertorous breathing, dilatation of the pupils, with failure to respond to light—the mask should be entirely removed until the danger is past. The color of the patient's face, the breathing, the pupils, the reflexes and the pulse should be almost constantly and simultaneously under observation. As a precautionary measure, it is advisable to prepare the hypodermic syringe with a solution of strychnine, sulphate gr. 1-20, which can be used toward the end of the operation, or if an emergency arises, and repeated if necessary. The table should be so arranged that at a moment's notice the head of the patient can be lowered, and plenty of room had to perform artificial respiration. Failing with the Sylvester method of artificial respiration, Laborde's method of regular traction upon the tongue should be resorted to.

From a practical standpoint, it seems to me, the principal danger of chloroform anaesthesia lies in the sudden stoppage of the patient's breathing, and this is due to over dosage or perhaps—and this is exceedingly rare—an idiosyncrasy of the patient. By the drop method, the dose of chloroform is to a certain extent regulated, whereas, by the old hap-hazard method, it is impossible to tell how much chloroform the patient is getting at one time. It should be impressed upon the mind of the anaesthetist that the danger lies in increasing the dose of chloroform and not in increasing the frequency of the same dose. Many physicians are in the habit of giving morphine and atropine hypodermically, just before the anaesthetic is begun; others give a mixture of laudanum and whisky per os, to lessen the amount of chloroform required; and often, in prolonged operations, some advantage is derived from their use.

The treatment of vomiting, following chloroform anaesthesia, seems to me to present few difficulties, provided the same has been properly administered. A favorite plan of mine is to give the patient a small dose of morphine hypodermically, as soon as the anaesthetic is stopped, or it may be advantageously com-

bined with strychnine, if the patient's pulse be feeble. Allow but small doses of water, preferably hot, place an ice bag at the back of the neck, and a mustard leaf over the epigastrium if nausea persists.

An ideal anaesthesia ought to be so planned and conducted that the patient should begin to show signs of returning consciousness within a few minutes after the application of the dressings.

To recapitulate: The main points in the safe and proper administration of chloroform are the following:

1. Watchfulness of the anaesthetist.
2. Regulation of the dosage of chloroform by dropping instead of pouring.
3. Have the patient breathe quietly at the beginning, so that the amount of chloroform inhaled will be nearly uniform; deeper as the anaesthesia progresses.
4. Careful examination of the patient.
5. Sufficient time for the administration of the chloroform.

Belladonna in

Bronchopneumonia.

Capillary bronchitis, or bronchopneumonia, still claims the "bad eminence" of being the most fatal of the medical diseases of infancy. Dr. J. A. Coutts, physician to the East London Hospital for Children, has a noteworthy contribution on the use of belladonna in this disease in the *British Medical Journal* of Jan. 28. He has used this drug as the sole medicament now in fifty or sixty cases of undoubted bronchopneumonia, with only two deaths. He attributes this remarkable record largely to the use of massive doses of the drug, one-fourth grain of the extract every three or four hours, giving this same amount to infants a few weeks old and to children of seven or eight. The dyspnea was checked usually by only a few doses, and the temperature also commonly fell to normal very soon. The disadvantages of the treatment were slight and unimportant. Delirium was present in only two cases. Flushing of the skin or a scarlet rash was noticed in the greater number of instances. The author refers the happy action of the drug in this disease to its drying up effects upon secretion.



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We will at all times be glad to give space to well written articles or items of interest to the profession.

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Colorado, Idaho, Montana, New Mexico,
Utah and Wyoming, at its annual meeting elected the
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The Coming Age. The *Coming Age* is a new journal. It is edited by B. O. Flower, founder of *Arena*. We notice that Prof. John Uri Lloyd is to contribute in the April number a paper titled "Do Physicians and Pharmacists Live on the Misfortunes of Humanity?" We are sure that the medical profession will be interested in this article. It would probably be interesting to have some one follow this article by a paper titled "Are the Physicians and Pharmacists Responsible for the Misfortunes of Humanity?" At all events we are sure that the author of "Etidorhpa" will give to the doctors and druggists an exceedingly spicy and interesting article.

Colorado State Medical Society. The twenty-ninth annual meeting of the Colorado State Medical Society will be held at the Brown Palace Hotel, Denver, June 20 to 22, 1899, and it is hoped that it will be one of the very best meetings in the history of the organization. On behalf of the Executive Committee I have much pleasure in extending to you an invitation to read a paper; by resolution of the committee all titles should be in the hands of the chairman by May 1, 1899. By further resolution of the committee, papers are limited to fifteen minutes in length; those taking part in discussion are limited to five minutes.

The following topics will receive special consideration: 1. Pneumonia. 2. Obstetric Lacerations of the Uterus, Vagina and Perineum. 3. Injuries to the Eye and Ear. 4. Gall-Stones. Volunteer papers are requested on these topics.

The profession of our State may justly take pride in the most successful and enjoyable meeting of the American Medical Association last June. All are urged to unite in making this coming meeting of our State Society of the greatest possible value.

CHARLES A. POWERS, *Chairman*.

Railroad Surgeons. "The outlook for the medical profession is most discouraging and humiliating at this time, and will be so long as the schools (more particularly the allopathic school) continue to ignore the many obvious violations of the code of ethics by physicians who engage in such unprofessional practices as that of serving corporations and other organizations for a modicum of established fees, and who, by this means, divert thousands of patients from the legitimate channels of regular practice. Why do we continue fellowship with the railroad surgeon (so-called), who treats employees for 50 cents per month; the contract doctor, who works for even less; or the health commissioners, who treat our private patients for nothing? Not even the shadow of the old time professional dignity and honor is left to us."—*Homeopathic Medical Journal*, February, 1899.

We say amen to the above. Every word of it is true. There is only one thing that we take exception to, and that is we do not see why it was necessary to apply that odious nickname enclosed in parentheses.

Diet in Acne. The regulation of the diet in this troublesome and so often obstinate affection is now generally admitted to be the most important element in the treatment of the disease. Patients themselves will usually have been trying various dietary experiments, along with the ordinary home remedies, before consulting a physician. Unless, however, the most explicit directions are given as to the proper diet, serious mistakes will be made by patients in the selection of foods, and especially as to its quantity. As Dr. Jackson says, in his "Manual of Diseases of the Skin:" "The well-to-do are prone to eat too much, and it is remarkable how rapidly their acne will improve by reducing their diet to the simplest elements. In many of them a milk diet, provided milk agrees with them, will accomplish a marked benefit." On the other hand, many young girls almost starve

themselves, entertaining the mistaken idea that a low diet will give them a fine complexion. Nothing could well be less true than this. Especially is there a prejudice against butter. The old explanation that skin eruptions were mainly due to the use of too much butter still remains absolutely true for most non-medical people, and even for some medical men. That butter should be used freely and that cod-liver oil and iron should be the only drugs required in many cases, as Dr. Jackson insists, would, to these good old conservatives, seem rank heresy. It is evident that more definite ideas as to the diathesis that underlies the etiology of acne have been acquired, and that the dietetic management of it rather than any empiric use of vaunted specifics constitutes the most modern therapeutics of this extremely frequent and bothersome condition.

Nasal Catarrh as a Cause of Disease. Jacobi (*Philadelphia Medical Journal*, Dec. 24, 1898) reminds us that nasal catarrh predisposes to and causes chronic hypertrophy, adenoid growths, tumefaction of submental and submaxillary lymph bodies, invasion of diphtheria and tuberculosis, and occasionally meningitis. As a preventative measure, he lays great stress upon cleanliness of the mucous membranes, and states that at least once a day a physiologic solution of salt water is poured through the nares of every infant or child over whom he has control. One of his many aphorisms is that "there is more danger in a dirty nose than in an unwashed face."

Irritable Bladder. This troublesome condition, so common in women, is now known to be due to hyperemia of the trigonum, as revealed by cystoscopy. Hiram N. Vineberg (*New York Medical Journal*, Jan. 7) speaks very highly of the local application to the red patches of a 5 to 10 per cent. solution of silver nitrate, by means of Kelly's cystoscope (No.

10 usually) and any suitable applicator. He has treated over fifty cases in this way during the past three years, all of which were cured, and it was seldom that more than a half dozen applications in all were required. The treatments may be repeated every five, six or seven days.

Use of Guaiacol in the Treatment of Epididymitis.

This drug is the most valuable remedy we possess for the prompt cure of acute epididymitis, says J. Clifford Perry, U.S.M.H., in the *Medical Record* of January. He bases this statement on an experience of twenty cases. The method he employs is to apply one cubic centimetre of pure guaiacol over the cord of the effected side, as it lies in the inguinal canal, and to paint the scrotum over the inflamed epididymis with two c.c. of a mixture of one part guaiacol and two glycerin. Two applications are made during the day, or three if the attack is very severe. Pain is usually relieved for some hours by the first application in twenty or thirty minutes. The fever also quickly subsides under the antipyretic action of the drug. Swelling rapidly diminishes and often disappears by the fifth or sixth day. The formation of dense nodular masses in the epididymis is less apt to occur than when treated by other methods.

One Thousand Cases of Labor.

Dr. J. S. Hammond gives a practical resume of this number of accouchements, with a maternal mortality of five, in the *American Journal of Obstetrics* for Dec. 1898. The average duration, noted in 700 instances, was twelve and one-half hours. Nearly one-fourth of the mothers had suffered miscarriages at some time. In the full 1,000 births there were 37 breech presentations, 3 shoulder, 8 footling and 2 face. Perineal lacerations occurred in 22 per cent. of the cases. Of 735 births noted in this regard, 397, took place between midnight and noon, and 338 between noon and

midnight. Podalic version he considers preferable ordinarily to the application of the forceps above the brim. He advises to tie the cord stoutly with two ligatures and cut beyond, not between them, leaving the placental end to bleed as freely as it may. As to post-partum hemorrhage, the writer has never seen a case which could not be controlled by external kneading of the womb, or by internal irritation with the hand, or by ergot hypodermically, or by all three of these measures. To relax a rigid os in the presence of ineffectual and almost unbearable pains, he considers morphine the best agent in a hypodermatic dose of one-half to three-quarters of a grain.

Post-Partum Douche. This procedure has been abandoned in the out-patient obstetric service of the Philadelphia Polyclinic. The patient's body is rendered aseptic before she is put to bed, after which a copious vaginal douche of lysol or creolin is given. When the labor is over the patient is again cleansed thoroughly, but no intravaginal douche is given. During the past year no case of septicemia occurred in this department.

Diagnosis of Tuberculosis of the Peritoneum. In a practical paper under this title in the December *International Journal of Surgery*, Ely van de Warker concludes that this disease is more capable of detection than almost any other affection of the peritoneal cavity. He lays special emphasis upon the free ascites becoming encysted by adhesions at a later stage, as well as upon the usual coincident involvement of the lungs or fallopian tubes. The aspirated fluid is frequently negative as to tubercle bacilli, though when these are present the diagnosis is certain. The thickening and massing of intestines and peritoneum may simulate solid tumors, but dull obscured tympany on deep percussion is sometimes present in the former condition. The temperature is

often subnormal for long periods. Cutaneous pigmentation, especially of the face, is occasionally a marked sign. Pleural effusions may complicate, just as in malignant abdominal disease. Ascites which begins without abdominal tenderness or a febrile condition or impairment of nutrition, is suspicious of this affection. In the event of a sudden onset of peritoneal tuberculosis, it may readily be confounded at the start with simple acute peritonitis, typhoid fever or hernia. Sacculated exudations are often wrongly diagnosed as ovarian cysts.

The Color of the Nails. Dr. Edward Blake, who has recently written a book upon the hand, states (*Medical Record*, Dec. 17, 1898) that the nails are pale in hectic and in anasarca, gray in serious internal disease, yellow in jaundice, white in convalescence, chalky in some forms of paralysis, acutely livid in ague and chronically purple in cyanosis. He says further that when one hand is persistently hot and the other cold, the case may be one of subclavian aneurysm, but is much more likely to be gout or lead poisoning.

Membranous Enteritis. This interesting condition is discussed by Einhorn in the *Medical Record* of Jan. 28. He observes that abundant nutrition is of the greatest value in treatment. A mixed diet containing plenty of vegetables is best. During severe attacks, light food should be given frequently in small quantities, rest in bed should be enjoined, and the pain may be relieved by warm poultices and the administration of an enema of a quart of warm water containing a teaspoonful of common salt or essence of peppermint, followed by the exhibition of codeine or opium and perhaps belladonna. During the intervals the methodical applications of luke-warm oil enemas, (250-500 c.c., to be retained if possible through the night) at first nightly for three weeks, then every other

night for three weeks, then twice weekly for four weeks, and finally once weekly for five or six months, is of the greatest importance in achieving a cure. Patients must accustom themselves to a regular morning evacuation by visiting the closet at the same hour every day. Cases complicated with enteroptosis and anomalies of the gastric functions must be treated accordingly.

The Dorsopedal Pad of Rickets. Of 100 tabulated cases of rachitis, A. H. Tubby (*Pediatrics*, Jan. 1) found definite dorsal pads of the feet in eighty instances. This thickening if recent (two to six months) is subcutaneous and semi-fluid. If the disease has existed for six to eighteen months, the pad is marked and is made up of thickened subcutaneous tissue and periosteum and overgrown epiphyses. The subcutaneous portion disappears at a period of eighteen to thirty-six months after the onset of the disease and leaves the bony changes well apparent to the touch.

A New Parisian Medical Journal. *Archives Provinciales de Medicine* is the name of this new monthly. The editor-in-chief is Marcel Baudouin. The leading article, a "Contribution to the Study of Mixed Tumors of the Parotid," by Curtis and Phocas, is an able contribution to this subject. They conclude that these growths are of conjunctival origin, and are in the beginning either endotheliomatous or lymphendotheliomatous in structure. The magazine is well illustrated with half-tones and other photogravures.

Polymyositis. Gowers, in the course of a characteristic clinical lecture (*British Medical Journal*, Jan. 14) states that this malady is almost exclusively a result of exposure to cold in rheumatic individuals. The distribution is bilaterally symmetric, as in polyneuritis. The muscles, at first very tender, in time undergo hardening and contracture, which may be extreme or

even insuperable. In the early stage rest, diaphoretics, salicylates and perhaps small doses of mercury do much to control the inflammation and lessen incurable sequelae.

The Diazo Reaction. The value and limitations of this simple urinary test are by this time pretty clearly defined. Whittaker (*New York Medical Journal*, Jan. 14) states that it is nearly always positive in typhoid fever from the fifth to the twenty-second day. The reaction is also present in practically every case of miliary tuberculosis, but only in pulmonary tuberculosis when running a rapidly fatal course. Its presence aids in distinguishing measles from scarlatina, and from simple tubercular meningitis. The test is apt to be negative when there are nephritic complications, but medication has no influence upon it.

Serum Treatment of Puerperal Septicemia. Reports of the use of antistreptococcic serum are becoming more frequent in medical literature and are generally favorable. A trustworthy serum should be employed, and the injections in justice to the remedy should be limited to cases of true streptococcus infection. The serum treatment ought to be regarded as an adjunct rather than as a substitute for local measures of antiseptics.

Vaccination. The demand for vaccine and vaccination in this city has been greater probably this winter than at any other previous season. It is estimated that not less than 25,000 persons have been vaccinated or revaccinated, about a third of whom were "scratched" at the city hall. The value of the procedure is unquestioned by people who are possessed of common sense. Statistics for the past century show incontrovertible evidence of its efficacy. In Germany, for instance, in 1871, when vaccination was not obligatory, there were 143,000 deaths from smallpox.

The rigid enforcement of compulsory vaccination and revaccination since 1887 has reduced the mortality to only 116 per annum. The dangers to be dreaded from vaccination have always been grossly exaggerated by anti-vaccinationists, who, like other rabid animals, make a great stir considering their small numbers. Even the slight actual bad results in the way of septicemia or erysipelas may now be entirely avoided if the vaccinator will use ordinary surgical cleanliness in conjunction with the glycerinated lymph. This is thoroughly tested (P. D. & Co.) and is put up in sealed glass tubes, thereby preserving its purity and strength. The glycerin served not only as a solvent, but also is an efficient preventive of accidental mixed infections.

Medical News Investigation of Christian Science. The regular medical profession is under obligations to the *Medical News* for the impartial and scientific investigation of Christian Science "cures" which it has lately instituted and carried through. The empty pretensions of these charlatans could be proved in no better way than by a simple detailed medical report of all the facts in each example of the alleged healing power of this silly cult.

Crematories Needed. The deaths in London amount now to 120,000 per annum. Of unused ground suitable for burial purposes there is only about 200 acres left within reasonable distance of the city. So overcrowded are the cemeteries that it is said to be a common occurrence for twenty poor people to be buried in one grave. Even this state of affairs, however, is surpassed in Havana, where the poorer classes rent a grave for a single year, at the end of which time their bones are thrown upon a common pile near the cemetery gates, where they are exposed to constant molestation by men and beasts. The American general has recently been forced to issue an order prohibiting soldiers from making playthings of these bones in their tents.

French Society Resume of the meeting of Jan. 19,
of Electrotherapy. 1899, M. Doumer in the chair.

William James Morton, of New York, lays claim to the discovery of the practical application of what he calls static inductive currents. In a former report, that appeared in 1881, re-edited with fuller details in 1891, he showed how he obtained these static inductive currents with a static machine, when a Leyden jar or any other condenser is introduced within the circuit. These currents are capable of producing physiologic tetany, whereas simple sparks excite only isolated muscular contractions. In a new apparatus, exhibited by Dr. Morton, the condenser is left out, and the patient is not placed within the circuit of the sparks.

M. M. E. Doumer and E. Musin have treated habitual constipation by means of local Franklinization applied chiefly over the iliac fossae. They have established the following results: 1. The electric flow at the level of the iliac fossae usually suffices to cure habitual constipation depending on neurasthenia. 2. It acts equally well in the constipation of convalescence from a certain number of general affections. 3. It is of no value in constipation connected with mucomembranous enterocolitis. 4. It is likewise impotent in intestinal atony, connected with lesions of the brain.

M. Videbeach, medical assistant at the hospital St. John, in Copenhagen, reported the matter of a sarcomatous tumor destroyed by the chemical galvanocantery, and which had not relapsed.

M. R. Sudnik, of Buenos Ayres, told of a second case in which he had applied with success the current of high frequency and high tension for a muscular contracture following traumatism.

EDITORIAL ITEMS.

Gastric Ulcer.—Tincture of iodine, in five drop doses, thrice daily, has been recommended in chronic cases.

Trifacial Neuralgia.—Murrell recommends 5 grains of butyl chloral hydrate in combination with 1-200 grain of gelsemine.

Enlightened Japan.—The Japanese government has ordained compulsory vaccination and revaccination every five years.

Mucous Patches.—For mucous patches in the mouth, Shoemaker recommends (*Medical Herald*) a 25 per cent. solution of chromic acid.

Cuticura Ointment.—This nostrum is said to consist of vaselin with 2 per cent. of carbolic acid, colored green and perfumed with oil of bergamot.

Leukonychia.—This extremely rare condition consists of a general whitish discoloration of the nails, due to the presence of air in and beneath them.

Hoarseness and Aphonia.—Dichromate of potassium, 1-100 grain every hour, is recommended for these symptoms when due to over-use of the voice or acute laryngitis.

Pitting of Smallpox.—A 10 per cent. ichthyol ointment, with lanolin as a base, is recommended to prevent pustulation and thereby the pitting so much dreaded by all.

Intestinal Antiseptics.—Bismuth naphtholate is ranked by Wilcox as first in efficiency, while at the same time it is not toxic in the ordinary dosage of 3 or 4 grams daily.

Zoster.—C. W. Allen (*Medical Record*) has obtained good and rapid results in about forty cases by varnishing the lesions with a 3 per cent. solution of methylene blue in collodion.

Baldness.—Barie (quoted in *New York Medical Journal*) alleges that if the hairy scalp is rubbed every night with a 1-30 solution of hydrochloric acid in alcohol, the falling of hair will cease.

Supraorbital Neuralgia.—For the supraorbital neuralgia of influenza, the editor of the *Georgia Journal of Medicine and Surgery* finds nothing else to work so well as a blister over the spot.

Apomorphine in Acute Alcoholism.—In acute alcoholic delirium with convulsions, nothing relaxes and soothes more quickly than a hypodermic injection of apomorphine, writes J. Edward Tompkins to the *Medical Record*.

Relation of Urea to Phosphoric Oxide.—The normal ratio of these two compounds in the urine is 8 to 1 or 10 to 1. In Addison's disease and malignant cachexia, the relative proportion of urea may be doubled or trebled.

Death by Electric Shock.—A constant phenomenon, according to Wyatt Johnson, is the fluidity of the blood both before and after removal from the body. The accompanying burn may be so slight as to be hardly noticeable.

Another Behring Patent.—On the principle of the old saying that "One might as well be hung for stealing a sheep as for stealing a lamb," Herr Professor Behring has applied for a German patent for an anti-tuberculous serum.

The Southern Medical Journal.—This journalistic infant began its existence with the beginning of the year. It is edited by Dr. J. W. P. Smithwick, and is published at Kinston, N. C. We welcome Brother Smithwick to the fold.

Gouty Testicular Pain.—In the gout of old men, says *International Journal of Surgery*, an attack occasionally begins in the testicle and gives rise to excruciating pain. Colchicum in full doses is a specific, and heat is usually grateful to the patient.

Removal of Blood Stains.—When you have blood upon your hands, first wash them in pure water says the *International Journal of Surgery*. Using soap at first is a mistake, as soapy water does not dissolve blood rapidly. Clear water and a nail brush should come first, soap next.

Uric Acid Diathesis.—Golding Bird (*Medical News*) recommends the following mixture: Sodium bicarbonate, 45 grains; benzoic acid, 15 grains; sodium phosphate, 80 grains; boiling water, 1½ ounces; mix, dissolve and add 3 ounces of cinnamon water. The dose is two teaspoonfuls three times a day.

Age and Carcinoma Uteri.—That cancer of the womb is not restricted to the period of the menopause is again illustrated by the account of a successful vaginal hysterectomy for this cause in a patient 26 years old, reported by Dr. L. Sexton in the January number of the *Louisville Medical Monthly*.

Foreign Bodies in the Air Passages.—According to the *American Journal of Surgery and Gynecology*, a number of cases have been lately reported of foreign bodies in the trachea, and even the bronchi, on which prompt irrigation of the nasopharyngeal space has excited cough and expectoration to such a degree that the foreign body was expelled at once and life saved.

Strontium in Acute Nephritis.—DaCosta speaks very highly of the diuretic action of lactate of strontium, 15 grains four times daily, in conjunction at the outset with hypodermics of pilocarpine, and with dry cupping, hot vapor baths and a milk diet.

White Bread and Brown Bread.—Lauder Brunton affirms that white bread, on account of its greater digestibility, is more nutritious than brown bread, though the latter may be indicated in case of constipation, lack of calcium salts or fatty indigestion.

Odor as a Symptom.—J. H. McCassy (*Medical Age*, Dec. 27, 1898) states that a person afflicted with pyemia has a sweet, nauseating breath. In scurvy, the odor is putrid; in chronic peritonitis, musky; in syphilis, sweet; in scrofula, like stale beer; in intermittent fevers, ammoniacal; in hysteria, like violets or pineapple.

Enemata of Blood in Tuberculosis.—Whittaker has noted marked gain in weight and nutrition under the repeated administration of a quart enema of equal parts of bullock's blood and water with two drams each of sodium bicarbonate and sugar of milk and a grain of common salt—the mixture introduced high up in the rectum.

Medical Monograph.—The *Kansas Medical Journal*, which has been published for the last ten years at Topeka, Kansas, has been discontinued, and its former editor, Dr. W. E. McVey, will have editorial control of the *Medical Monograph*, a 150-page monthly, which will be published in the place of the *Kansas Medical Journal*.

Neurasthenic Headache.—When associated with low vascular tension, Prof. Joseph Collins (*Medical News*, Feb. 11) has found the following formulary particularly useful: 5 grains of caffeine citrate and 10 grains each of sodium bromide, sodium bicarbonate and tartaric acid—make one powder and take in water while effervescing.

Vesical Tuberculosis.—M. Nogues, in *Le Progres Medical*, speaks highly of the therapeutic value of ichthyol in 1 to 4 per cent. aqueous solutions, using rather more copious instillations than are usually employed. The functional results have been very good, the urine clearing and the tenesmus being much diminished. There is a total absence of the irritating effects so common with bichloride of mercury.

Rapid Cure of Incoercible Vomiting of Pregnancy.—Jules Geoffroy (quoted from *La Clinique* in *American Journal of Obstetrics and Diseases of Women and Children*) has found that this form of vomiting is due to a reflex contracture of the pylorus, duodenum, and particularly the ileopelvic curve of the colon. Prolonged palpation of these parts constitutes the best form of treatment, both sure and rapid, often curing in from one to three short sittings.

Heroin for Cough.—Morris Manges speaks highly of this new opium derivative (*New York Medical Journal*, Nov. 26, 1898) in allaying both cough and pain in the chest, in acute or chronic catarrhs of the respiratory tract. Heroin occurs as a white, crystalline, slightly soluble powder. The dose is from 1-12 to 1-6 of a grain.

A New Book—We are pleased to announce to our readers that Lea Brothers & Co. will shortly issue a new edition of Jackson's "Ready-Reference Hand-Book of Skin Diseases." We are in receipt of a number of advance sheets of this most excellent book and we publish one of them in this issue of the journal: "Diet in Acne."

The Pathology of Diphtherial Paralysis.—From six personal pathologic examinations and a historical digest, Frederick E. Batten (*Pediatrics*, Feb. 1) concludes that it is probable that the dominant lesion in diphtherial paralysis is a parenchymatous degeneration of the myelin sheath of the nerves, affecting alike both motor and sensory fibres.

Impotency in Diabetes.—This is always a suspicious sign, says Whittaker (*Louisville Journal of Surgery and Medicine*, Dec., 1898) and where it cannot be attributed to excesses, should direct attention to diabetes. Locomotor ataxia is perhaps the only disease which is more universally attended with impotence. The preservation of potency is always a good sign.

Treatment of Sweating Feet.—Gerdeck (quoted in *Therapeutic Gazette*) recommends painting the soles and heels with formalin, applied by means of a brush in the afternoon, the evening and the following morning, giving about four coats each time. The offensive odor disappears almost at once. The effect of the procedure lasts three or four weeks, when it must be repeated.

Tubercular Diarrhea.—For the treatment of this late symptom, Whittaker (*Ohio Medical Journal*, Nov., 1898) recommends bismuth subgallate (dermatol) in doses ranging from 15 to 60 or even 90 grains a day, best given dry on the tongue. Another preparation which has been highly effective in the writer's experience is tannalbin, in average doses of 15 grains three or four times daily.

Epistaxis.—H. D. Didama (*Philadelphia Medical Journal*) asserts that nosebleed can be arrested in many instances by the administration of a grain or more of opium, repeated if necessary in two or three hours. He has had no occasion to employ any other treatment for more than thirty years, as this has succeeded even after the failure of astringent injections and plugging the nostrils.

BOOKS.

Merck's 1899 Manual of the Materia Medica.—Together with a Summary of Therapeutic Indications and a Classification of Medicaments. A Ready Reference Pocket Book for the Physician and Surgeon. Price, \$1.00. Merck & Co., New York.

Messrs. E. B. Treat & Co. announce the early publication of their International Medical Annual, seventeenth year, 8vo, 700 pages. Price, \$3. Among special articles may be mentioned "Practical X-Ray Work," by R. Norris Wolfenden; "Advances in Skull Surgery," by Seneca D. Powell; "Surgical Treatment of Paralysis," by Robert Jones and A. H. Tubby; "Climatic Treatment of Consumption," by F. de Havilland Hall; "Legal Decisions Affecting Medical Men," by William A. Purrington; and "The Chief Pathogenic Bacteria in the Human Subject," by S. G. Shattock.

A Compend of Human Physiology.—Especially Adapted for the Use of Medical Students. By Albert P. Brubaker, A. M., M. D., Adjunct Professor of Physiology and Hygiene in the Jefferson Medical College; Professor of Physiology in the Pennsylvania College of Dental Surgery, Etc. Ninth Edition, Revised and Enlarged. With New Illustrations and a Table of Physiologic Constants. Price, 80 cents. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. 1899.

Of the sixteen numbers in Blakiston's series of quiz-compendes, this one takes the lead in the point of editions. The book is one of the best of its class, and it is no wonder that overworked medical students avail themselves of such compact epitomes of the essentials of varied subjects they are required to "be up on."

Christian Science.—A Sociological Study, by Charles A. L. Reed, A. M., M. D., Cincinnati, O. Single copies, 10 cents; twelve copies, \$1.00. Sent postpaid on receipt of price. McClelland & Co., Publishers, Cincinnati.

This pamphlet has been printed in accordance with the following resolution adopted by the North-Western Ohio Medical Association, December 9th, 1898: "*Resolved*, That Dr. Reed is hereby requested to submit his address on Christian Science, a Sociological Study, for publication in such form that it may become available, at small expense, to physicians, clergymen, educators and others, for distribution in their respective communities." This relic of the dark and barbarous past is ably dissected, and the brochure is bound to do much good to the public and the profession if given a wide circulation.

The Phonendoscope and its Practical Application.—Translation of Lectures Delivered by Prof. Aurelio Bianchi, of Parma. With 37 Illustrations. Translated by A. George Baker, A.M., M.D.; with translations of special articles by Felix Regnault, M.D., of France, and M. Anastasiades, M.D., of Greece. Price, in cloth, 50 cents; postage, 5 cents. Philadelphia: George P. Pilling & Son. 1898.

We have here an interesting account, well illustrated, of the practical uses of phonendoscopy, by the inventor of the phonendoscope. Every physician who makes use of this instrument would do well to have the book also.

Transactions of the American Climatological Association for the Year 1898.—Volume xiv. Philadelphia: Printed for the Association.

The present volume is correct typographically, has a number of handsome illustrations and includes many able contributions bearing particularly upon tuberculosis. The officers of the association for 1899 are: President, Beverly Robinson, New York; Vice-Presidents, James A. Hart, Colorado Springs, and Richard C. Newton, Montclair, N. J.; Secretary and Treasurer, Guy Hinsdale, Philadelphia.

3,000 Questions on Medical Subjects.—Arranged for Self-Examination. With the Proper References to Standard Works in which the Correct Replies will be Found. Second Edition, Enlarged. Price, 10 cents. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. 1899.

This little volume covers the whole field in a comprehensive and practical manner. There is no doubt that if a student could answer all these questions understandingly, he would be able to pass his examinations creditably.

The Sexual Instinct.—Its Uses and Dangers as Affecting Heredity and Morals. Essentials to the Welfare of the Individual and the Future of the Race. By James Foster Scott, B.A., M.D., C.M. Late Obstetrician to Columbia Hospital for Women and Lying-In Asylum, Washington, D. C. New York: E. B. Treat and Company 241-243 West Twenty-Third Street. 1899. Twelvemo; 436 Pages. Price, \$2.00.

This book is full of plain speech, intended for laymen—not for women or boys. The author draws a sharp, clear line between the sexual and the sensual. He shows, by specific examples, the great importance of a pure life to the man himself and to his descendants. The dangers of the venereal diseases are vividly portrayed. The degrading results of onanism and the sexual perversions are briefly described. The heinousness and harmfulness of criminal abortion are shown conclusively. The work is not a "family doctor book" in any sense, and can safely be recommended to and by physicians. Its teachings are sound and true, and it is bound to accomplish good.

Practical Lessons in Nursing—Fever Nursing.—Designed for the Use of Professional and other Nurses, and Especially as a Text-Book for Nurses in Training. By J. C. Wilson, A.M., M.D., Professor of the Practice of Medicine and of Clinical Medicine in the Jefferson Medical College. Third Edition, Revised and Enlarged. Twelvemo; 241 pages. Price, \$1.00. Philadelphia: J. B. Lippincott Company.

This neat little volume gives practical directions for fever nursing in general and for nursing in the continued, the periodical and the eruptive fevers, and in fevers with marked local manifestations. In addition to the paragraphs on nursing, there is a brief description of the causation, nature and course of each fever. This part of the subject is illustrated with a number of typical temperature charts. The book is one that will help the nurse to help the doctor to help the patient. We therefore recommend it cordially to the nursing fraternity.

Manual of Clinical Chemistry.—By Elias H. Bartley, B.S., M.D., Ph.G., Professor of Chemistry and Toxicology in the Long Island College Hospital; Dean and Professor of Organic Chemistry in the Brooklyn College of Pharmacy. With 33 Illustrations. Twelvemo; 150 pages. Price, \$1.00. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. 1899.

This little volume is in part an adaptation from the author's larger text-book. To this has been added a chapter on urinary diagnosis and a collection of instructive experiments in physiological chemistry, with a short and practical scheme for the examination of artificial foods. The clinical examination of gastric contents, feces, milk and urine is clearly described. The book contains all the essentials of chemical diagnosis at a minimum cost. It is designed particularly for the use of second year students and practicing physicians.

A Manual of Bacteriology.—By Herbert U. Williams, M.D., Professor of Pathology and Bacteriology, Medical Department, University of Buffalo. Twelvemo; 263 pages. With 78 Illustrations. Price, \$1.50. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. 1898.

This little work furnishes an interesting and clearly written epitome of the science and art of present day bacteriology. The text is in four parts, dealing respectively with technique, the classification and general principles of bacteriology; immunity and antisepsis; non-pathogenic bacteria; and pathogenic bacteria. Two special chapters are "Disinfectants and Antiseptics," by Thomas B. Carpenter, M.D., and "Preparation of Instruments, Ligatures and Dressings for Surgical Purposes," by Chauncey P. Smith, M.D. We recommend the book for its simplicity and serviceability to medical students and general practitioners.

On the Origin and Progress of Renal Surgery.—With Special Reference to Stone in the Kidney and Ureter, and to the Surgical Treatment of Calculous Anuria; being the Hunterian Lectures for 1898, together with a Critical Examination of Subparietal Injuries of the Ureter.—By Henry Morris, M.A., M.B., London, F.R.C.S., Senior Surgeon to the Middlesex Hospital; Examiner in Surgery in the University of London; Hunterian Professor of Surgery and Pathology, Royal College of Surgeons of England. Price, \$2.00. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. 1898.

This volume furnishes a strong argument for early operation in renal stone, and throws a flood of original light upon the diagnosis of this frequently obscure condition. Each point of practical importance is emphasized by interesting case reports. At the back of the book are ten tables of 267 cases of renal operations performed by the author, together with a table of 49 collected cases of operation for calculous anuria. The text is suitably illustrated as to pathologic conditions and surgical technique.

A Treatise on Fractures and Dislocations.—For Practitioners and Students. By Lewis A. Stimson, B.A., M.D., Professor of Surgery in Cornell University Medical College, New York. In One Octavo Volume of 823 Pages, with 321 Engravings and 20 Full-Page Plates. Cloth, \$5.00 net. Leather, \$6.00 net. Just ready. Lea Brothers & Co., Philadelphia and New York.

This author is already well known by a two volume work on the same subject, published in 1883 and 1888. His extensive experience at that time has been amplified and perfected by eleven years of service in the House of Relief, or Hudson Street Hospital, where traumatic cases are very numerous. He has eliminated much that is merely historical, has rewritten most of the text and has imparted to the present book a more personal spirit. The condensation of the work into a single volume makes it better adapted to the needs of the student and the practitioner, while bibliographical references have been considerably extended. A number of uncommon or unique but important traumatic conditions, observed by the author, are here reported for the first time in an American text-book. One of these cases, studied in detail, is a rare combination of fracture and dislocation of the shoulder, due to direct violence. His conservative method of operative treatment for old dislocations of the elbow has, in all of ten cases operated upon by himself, given flexion within a right angle and extension varying from 120 to 170 degrees, with preservation of rotation. Concerning the diagnostic value of the X-Rays in fractures and dislocations, the author's conclusions coincide with those of all well informed surgeons, namely, that "it cannot fairly be said that they have yielded much information of practical value which could not have been obtained by palpation.

Probably their usefulness will be increased by improvements in methods and apparatus, but at present the information which they give needs to be sifted with great care from among many misleading appearances." Apropos this fact, we note among the numerous beautiful skiagrams that illustrate the text, one of a bimalleolar Pott's fracture, in which the epiphyseal separation of the external malleolus is shown very clearly, while the fracture of the internal malleolus is not revealed by the skiagram, though it was recognized clinically with absolute certainty. The treatise in its present form is all and more than could be desired; it is pointed, practical, comprehensive, exhaustive, authoritative, well written and well arranged. The author shows a thorough appreciation of scientific principles and practice, based upon acute and systematic observation.

The American Year-Book of Medicine and Surgery.— Being a Yearly Digest of Scientific Progress and Authoritative Opinion in all Branches of Medicine and Surgery, drawn from Journals, Monographs and Text-Books of the Leading American and Foreign Authors and Investigators. Under the general editorial charge of George M. Gould, M.D. Illustrated; octavo; 1102 pages. Price in cloth, \$6.50; half morocco, \$7.50. For sale by subscription. Philadelphia: W. B. Saunders, 925 Walnut Street. 1899.

The list of contributors who have collected and arranged the contents of this volume includes the following names: Samuel W. Abbott, John J. Abel, J. M. Baldy, Charles H. Burnett, Archibald Church, J. Chalmers Da Costa, W. A. Newman Dorland, Louis A. Duhring, D. L. Edsall, Virgil P. Gibney, Henry A. Griffin, John Guiteras, C. A. Hamann, Alfred Hand, Jr., Howard F. Hansell, Milton B. Hartzell, Barton Cooke Hirst, E. Fletcher Ingals, Wyatt Johnson, W. W. Keen, Henry G. Ohls, Wendell Reber, David Riesman, Louis Starr, Alfred Stengel, G. N. Stewart, J. R. Tillinghast, Jr., J. Hilton Waterman. It will be noted that, excepting the late Dr. Pepper, the editorial staff is nearly the same as last year. This is an important point, since, as the editor remarks, "practice makes perfect" in compilation and collaboration as in everything else. Practically everything new of consequence in the medical literature of the past year is here accurately recorded in the fewest words compatible with clearness. The contents embrace general medicine, general surgery, obstetrics, gynecology, pediatrics, pathology, nervous and mental diseases, orthopedic surgery, ophthalmology, otology, diseases of the throat and larynx, cutaneous medicine and syphilis, materia medica, experimental therapeutics and pharmacology, anatomy, physiology, legal medicine, and physiologic chemistry. The critical editorial interpolations are invaluable in the proper estimation of the true worth of clinical reports and general deductions. Full references to the original

text are given at the bottom of each page. All parts of the work are systematically arranged. Leading facts are emphasized by means of heavy type. A very complete index affords instant access to any particular subject. The work embodies an enormous mass of useful information for physicians and surgeons generally.

Announcement of Importance to Every Physician.—Messrs. Lea Brothers & Co. announce for publication in March, 1899, the first volume of "PROGRESSIVE MEDICINE," a new annual which will be issued in four handsome octavo, cloth bound and richly illustrated volumes of about 400 pages each. The several volumes will appear at intervals of three months. In this age of unusual progress, so rapid is the advance in all departments of medical and surgical science that the need for condensed summaries which shall keep the practitioner up to date at the least possible expenditure of valuable time has become imperative. Many attempts in the way of Year-Books, Retrospects and Abstracts have been made to meet this growing need, but in nearly all of these the process of condensing has not been preceded by a sifting of the good from the useless, and consequently the reader is presented with a mass of information from which he must select with care and study the items which are useful and reliable. What the busy physician needs today is a welltold tale of medical progress in all its lines of thought, told in each line by one well qualified to cull only that matter worthy of his attention and necessary to his success. He needs material which shall teach him all that the master of his specialty knows of the year's work. It is with the object of presenting only such readable and useful material that these volumes are published, and every contributor to the pages of "PROGRESSIVE MEDICINE" will say what he has to say in an original narrative form, so that every statement will bear a personal imprint expressing not only the views of the author cited, but the opinion of the contributor as well. To insure completeness of material and harmony of statement, each narrative will receive the careful supervision of the General Editor, Dr. Hobart Amory Hare, whose reputation will everywhere be acknowledged as ensuring practical utility in a high degree. Those associated with Dr. Hare in the production of "PROGRESSIVE MEDICINE," include a brilliant gathering of the younger element of the profession, well representing the class which is so energetically contributing to make modern medical history. With the appreciation of the self-evident utility of such a work to all practitioners, the publishers are enabled to ask the very moderate subscription price of ten dollars for the four volumes. The publishers offer to send full descriptive circulars and sample pages to those applying for them.

SELECTIONS.

"I have used Peacock's Chionia and find it very effective. I shall continue to prescribe it in my practice."—A. P. Dalrymple, M.D., New York, N. Y.

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Pepsin is undoubtedly one of the most valuable digestive agents of our materia medica, provided a good article is used. Robinson's Lime Juice and Pepsin, and Arom. Fluid Pepsin, (see page 3 this number) we can recommend as possessing merit of high order. The fact that the manufacturers of these palatable preparations use the purest and best pepsin, and that every lot made by them is carefully tested before offering for sale, is a guarantee to the physician that he will certainly obtain the good results he expects from pepsin.

Intra-Nasal Diseases.—Speaking of Unguentine, we have found it an excellent application to the nose after the removal of spurs of the septum or anterior hypertrophies by either the saw, snare or cautery. Frequently the crusty scab which forms is the source of considerable annoyance to the patient and actually delays the healing process. Frequent washing with alkaline solutions render the tissues boggy and even then is not always effectual. A small pledget of cotton, with the ointment applied to one side and placed in situ, will promote a more rapid healing of the nasal tissues than any other method with which we are familiar. After a few hours, a bit of the ointment may be applied frequently and the abraded surface kept comfortable as well as clean during the healing process.—*Atlantic Medical Weekly.*

Dr. C. Morrosa, 1045 Mission St., San Francisco, Cal., says: "I have used S. H. Kennedy's Extract of *Pinus Canadensis* (White) in one case of gonorrhea. A lady had a discharge for months and had been treated with iodine crystals in water as an injection, with no effect except to soil her clothing. I gave her a bottle of S. H. Kennedy's White *Pinus Canadensis*, giving directions to use as an injection internally; gave fluid ext. *prunus virg.* as a tonic. She lives in Alameda, and only yesterday she sent me some other sufferers, telling them I cured her. I will say in conclusion that your preparations are good. I have used them in some minor cases that I did not think worth while noting at the time, always with success."

A Very Grave Error.—The experience of the best men of the profession, not only of the United States, but abroad, has established the clinical value of Antikamnia. Among those who have paid high tributes to its value, and who occupy positions of great eminence, may be mentioned Dr. J. Acheson Wilkin and Dr. R. J. Blackham, practitioners of London. They have found it of value in the neuralgias and nervous headaches resulting from over-work and prolonged mental strain, paroxysmal attacks of sciatica, brow-ague, painful menstruation, la grippe and allied conditions. Indeed, the practitioner who has such cases as the latter come under his observation, who attempts their relief by opiates and stronger drugs, when so efficient an agent can be used, which is much less harmful, commits a grave error. Experience goes to prove that 10-grain doses of Antikamnia, in an ounce of sherry wine, taken every two to four hours, will carry the patient through these painful periods with great satisfaction.—*Medical Reprints*, London, Eng.

Protargol in Ocular Therapeutics.—In a discussion upon some of the modern drugs before the Louisville Medico-Chirurgical Society (*American Therapist*, Jan. 7, 1899), Dr. William Cheatham stated that since resorting to the use of Protargol in diseases of the eye, he had done away with the nitrate of silver almost entirely. He had used Protargol in all forms of conjunctival inflammation, especially in conjunctivitis with purulent secretion. In ophthalmia neonatorum he had found it much superior to silver nitrate, as it produced much less irritation, did not stain the eye, and penetrated far more deeply. Dr. J. M. Ray had also observed that Protargol has a decided beneficial influence upon the pus flow in ophthalmia neonatorum, and considered it a very valuable remedy in ordinary cases of conjunctivitis. Dr. S. G. Dabney expressed the opinion that Protargol had come to stay. He believed that it would be an advantage to increase the strength of the solutions from 3 to 5 per cent. in eye diseases, and stated that it could be employed as strong as 10 per cent. or even stronger.



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ORIGINAL COMMUNICATIONS.

INTRA-VENOUS SALINE INFUSION IN SUPPRESSION OF URINE AND COLLAPSE DUE TO VOMITING OF PREGNANCY.*

By J. RIDDLE GOFFE, M.D.,

Professor of Gynecology, New York Polyclinic Medical School and Hospital,
New York, N. Y.

The prompt efficacy of saline injections in relieving shock and the many other unfavorable symptoms following hemorrhage is now recognized, and in this procedure the profession has been led to feel that at last a sheet-anchor has been found. The two conditions, however, of hemorrhage and shock are the ones in which this therapeutic measure has especially commended itself and to which it has usually been confined.

I desire to report to-night a case in which it was used for an entirely different purpose. The case is somewhat unique, not only because of the condition for which the procedure was employed, but because of the extraordinary amount of saline solution which was injected. The history of the case is as follows:

Mrs. McL., 28 years of age, was seen by me in consultation with her family physician, on December 23, 1898. She was three months pregnant and had been suffering from persistent vomiting throughout the entire course of gestation. She was the mother of one child, 4 years old, and had had a miscarriage two years previously at the third month. At that time she had also suffered from serious nausea, but less severe than during this last experience. During the three weeks previous to consulting me, the patient had been nourished entirely by rectal injections, not even a swallow of water being retained by the stomach. She was nervous and anxious, almost pulseless at the wrist, and in a condition demanding prompt relief. The amount of urine passed

* Presented at a meeting of the Section on Obstetrics and Gynecology, N. Y. Academy of Medicine, Feb. 23, 1899.

had been very scant, but that was attributed to the limited quantity of fluid ingested or absorbed, and the attending physician reported it normal in character, except for the presence of a small amount of albumen. Careful inquiry elicited the information that all known therapeutic means of relieving the patient's condition had been tried, but without avail. The attending physician was of the opinion that the uterus should be emptied of its contents immediately, as a last resort, and in this I cordially agreed. The patient was promptly removed to my sanitarium. Light anaesthesia was induced by chloroform, the cervix uteri dilated, and the uterus emptied of its contents and packed with iodoform gauze.

Upon recovering from the anaesthetic the condition of the stomach did not improve, nor did the kidneys resume their function. In spite of vigorous efforts to stimulate the activity of the skin and kidneys no success was attained and the patient grew steadily worse. Upon the following day her condition was desperate. She was at this time absolutely pulseless at the wrist, her arms were cold above the elbows and her feet and legs above the knees. The temperature was 101° F. It occurred to me that an infusion of hot saline solution would relieve her at least temporarily, and, accordingly, its employment was decided upon. The median basilic vein in the left arm was opened, and from an ordinary douche bag, rendered sterile by boiling, a current of normal salt solution at a temperature of 110° F. was allowed to run into the vein. The temperature of the water in the douche bag was maintained by preparing a quart or two at a time and keeping the bag wrapped in hot bichlorid towels. The result was magical. The pulse steadily improved, and, as the process went on, the color gradually returned to her lips and cheeks, and she dropped asleep. Her pulse was now strong and full and the breathing perfectly natural. The infusion was therefore continued, and when two quarts had been injected beads of hot perspiration began to appear upon her forehead and face. This gradually spread over the entire body, and as there were no symptoms to indicate that any unpleasant consequences were likely to follow its continuance, the injection was proceeded with, until by careful measurement five quarts had been used. At this stage of the proceedings the skin was so active that the water was evidently transuding as rapidly as it was being injected, and as the object seemed to have been accomplished, the procedure was stopped. The time consumed in the infusion was forty-five minutes. The patient was then wrapped in blankets and covered with a rubber sheet to maintain the process of perspiration.

At the end of two hours and forty-five minutes the catheter was passed and thirteen ounces of urine withdrawn—the first the patient had passed for forty-eight hours. The nitric acid test demonstrated 50 per cent. of albumin. During the next twenty-four hours the patient passed eighty-three ounces of urine, and from that time on she steadily improved, until at the end of two weeks she was able to return to her home. The stomach recovered its ability to retain a liquid diet in small quantities, frequently repeated, until at the time of her departure she was taking two quarts of milk daily. This treatment has been continued and at last accounts the patient was still on the mend.

It seems evident that the results accomplished were due to two factors: First, the high temperature of the infusion, and, secondly, to the large quantity which was employed.

In answer to some inquiries recently addressed by me to the family physician, I have just to-night received from him by mail the following statements: "Prior to operation, urine was voided in very small amount, not averaging for some days over four ounces in twenty-four hours, and was not of especially high gravity, never over 1020. Her skin was constantly moist, however; she retained apparently nothing on the stomach. She is now convalescent, passes a good daily amount of urine, which I have examined to-day and find to be of amber color, 1013, alkaline reaction, no albumin, no casts, some mucus. The patient eats and sleeps well and attends to her work about the house."

The patient was evidently suffering from more or less uremic poisoning at the time she came into my hands for treatment.

EARLY TUBAL PREGNANCY.

By H. D. NILES, M.D.,

Gynecologist to The Holy Cross Hospital,

Salt Lake City, Utah.

When in our leisure moments we review the history of the splendid achievements of modern surgery, and more particularly as we dwell upon those chapters recording the brilliant triumphs of recent intra-peritoneal surgery and are made to realize the marvelous possibilities of the newer surgical procedures, as they are revealed to us in the work of the past decade, we cannot but feel a reasonable degree of professional pride and gratification.

however little we personally may have contributed to these advances; and we may be led to inquire if it be not presumptuous to attempt or even hope for any notable progress in the near future. Those who are in close sympathy with the progressive spirit of the age will, however, agree that the responsibilities of the medical profession of today are not destined to end with the memorizing and application of the principles and methods of the past, and that we are rarely without occasion and opportunity for further advancement.

Thus far the evolution of our ideas of the management of intra-peritoneal disease must be credited largely to a gradually perfected technique and an acquired manual dexterity. But we still have a more or less constant mortality and a proportion of imperfect results that we cannot reasonably expect to reduce by any refinement of technique or exhibition of operative skill. These factors have served and are serving their important purpose, but there is a limit even to their usefulness—if not to their fascinations—and it is quite apparent that they cannot be trusted to correct those failures that are conceded to depend upon a too late or a wrong diagnosis, or upon an imperfect conception of the special pathology of the peritoneum or upon many other known and unknown conditions, that as yet baffle our highest surgical endeavors.

In order to indicate the probable source from which I believe we may expect our next advances in pelvic and abdominal surgery and the lines on which we may hopefully direct our efforts, permit me to state briefly some conclusions that seem to me to be logical and fair, and which I trust you will consider, even if you are not prepared to accept them.

The unsatisfactory results attending the treatment of malignant disease of the uterus and puerperal septicaemia is evidence of our need of greater diagnostic acumen and a better understanding of the pelvic lymphatic system.

The fact that so many of the remote and so-called reflex symptoms of pelvic disease are still unexplained, suggests a need for a more precise knowledge of the physiology and anatomy of the pelvic structures.

The fact that either peritoneal adhesions, or the incomplete removal of infective tissues are responsible for a large percentage of our deaths and imperfect recoveries, leads me to believe that sooner or later all methods or routes that do not guarantee, or at least permit, completeness will become obsolete.

The fact that when the peritoneum is infected by contact with pus, either during or before an operation, some patients die and some do not, is not conclusive evidence that the virulence

of the poison alone determines the fatality, but that the relative virulence of the poison, as compared with the resistance put up by the peritoneum, decides the fate of the patient; and this suggests the need of strengthening the reparative and phagocytic powers of the peritoneum, as well as the weakening and diluting of the poison in every case of peritoneal infection.

The fact that appendicitis is still responsible for many thousand deaths and a large amount of suffering annually, in the face of the positive knowledge that there is always a time in the history of each case when the infection is imprisoned within the appendix, when an operation at the hands of any experienced operator is perfectly safe and promises a complete recovery, points either to our need of a better means or a greater alertness, in diagnosis, or to an attempt to evade or violate an established principle of surgery, viz.—the presence of infection and pus within the human body is always an indication for its removal by the safest and most direct route.

I trust that you will find application for some of these thoughts in our consideration of the special subject of this paper, for here, as elsewhere, the attractions of brilliant operative procedures and the multiplication of ingenious and complicated methods seem at times to have diverted us from and lessened our faith in the guiding principles of surgery.

It is not the object of this paper to repeat a history or story which can be more pleasantly and satisfactorily pursued at your own fireside, but to emphasize the importance of clinging tenaciously to those *principles* upon which is founded our present successful treatment of an accident that for so many centuries carried to an untimely grave thousands of women annually. Moreover, I believe this accident still has a preventible and reducible mortality, which can never be overcome by any further refinement of methods alone.

Eleven years ago last October, the British Medical Journal published Mr. Lawson Tait's account of his first thirty-five operations for extra-uterine pregnancy, with thirty-three successes. Although, long before this, surgical measures had been proposed and occasionally practiced, the true nature of this accident and its rational treatment did not become apparent to the profession generally until Mr. Tait's logical arguments, supported by ample clinical testimony, forced conviction upon all thinking men. Ten years' researches and experience has only made more apparent the simple truths enunciated by Mr. Tait.

Tubal pregnancy is an easily recognized, not uncommon accident, that without surgical interference must of necessity end fatally in nearly every instance, by hemorrhage or peritonitis.

DENVER MEDICAL TIMES.

The presence of bleeding vessels and clotted blood within the peritoneal cavity, as in other parts of the body, is always an indication for the prompt ligating of the former and the complete removal of the latter by the safest and most direct route. The meeting of these indications involves no operative procedure that cannot be performed with perfect safety by any experienced surgeon, employing modern methods.

If these statements are true, and I believe that few experienced men will care to qualify their acceptance of them, there is a time when and there are means by which every case of tubal pregnancy can be saved. The knowledge so recently bequeathed us, that enables us to save 90 per cent., does not lessen our own obligations to search out and if possible remove the cause of our present 10 per cent. mortality. We certainly should not be diverted by the successes of the past from a studious effort to correct the failures of the present. Does the fault lie with the principles or with the methods, or our interpretation of the former or application of the latter?

My own experience (limited to seventeen cases operated upon, besides those unrecognized), as well as my observations and studies, would lead me to believe that the present mortality depends upon, first, a too late or a wrong diagnosis; second, an imperfect comprehension or direct evasion of the simple principles laid down by Mr. Tait, leading to a non-surgical conception of the disease; third, a delayed or incomplete operation; fourth, the patient's refusal to submit to an operation.

The majority of my cases were first diagnosed, either by the attending physician or myself, as an early miscarriage; and I believe that this is a very natural and common error, though it ought never to be made by one who has always in mind the possibility of tubal pregnancy when examining a patient presenting the symptoms of a miscarriage.

A peritonitis, due to the escape of blood from a ruptured tube, may also be easily mistaken for a peritonitis due to other causes. Hysteria, too, has been made accountable for the pelvic pains accompanying leakage from the tube. I have often suspected, but never positively diagnosed early tubal pregnancy before rupture, but the fact that it has been done by other diagnosticians, and the danger of death from the first hemorrhage, should stimulate us to be especially painstaking in our examination of possible cases.

After rupture the symptoms are usually unmistakable, but we will be more alert and less likely to err if we carry to the bedside of every possible sufferer from this accident a mental picture

of the chief differentiating signs and symptoms, somewhat like I have tabulated below:

TUBAL PREGNANCY.	MISSCARRIAGE.	PERITONITIS.
History of recent irregularities in menstrual periods, with or without the skipping of a period.	History of having missed a period, followed by a hemorrhage.	No history of menstrual changes, but one pointing either to a pyosalpinx or an appendicitis.
Discharge of decidua membrane. (Pathognomonic.)	None.	None.
The presence of a tumor recognized as an intraperitoneal hematocele. (Pathognomonic.)	Enlarged uterus, but no tumor.	No tumor, or at least no intraperitoneal hematocele.
Sudden onset, accompanied by agonizing pains, extending to bladder and rectum, producing shock, faintness and signs of collapse.	More or less bearing down pains, not so severe. No shock.	Pains are shooting more diffuse, not likely to produce sudden collapse.
Tenderness usually exquisite and more marked about bladder and rectum.	Tenderness limited to uterus.	Tenderness less marked and more diffuse.

I am quite aware that probably every member of this association is familiar with these and all the other signs and symptoms of this accident, but I am equally positive that when every member of our whole profession not only possesses this knowledge, but has it quickly available for instant application, fewer women will die of tubal pregnancy, for I am convinced that it is less a lack of knowledge and skill than a want of alertness that leads us to overlook this condition.

The moment our diagnosis is made, we know that a woman's life is in peril, not only from the painful symptoms, but from the existence of bleeding vessels and blood and debris within the abdominal cavity. We know, too, that the ligation of these vessels and removal of this blood and debris can be accomplished with comparative ease and perfect safety, and that until this is successfully accomplished our patient is in great danger, first, from the hemorrhage, and secondly from peritonitis. To hesitate under such circumstances, in the performance of a duty so plain and so urgent, seems to me culpable, and I have yet to hear any rational defense of the position of those who employ any method of treatment based on the non-surgical conception of this accident. Even the proposal or description of such methods are demoralizing in their effect and are indirectly responsible for permitting this second cause of mortality to be operative.

By the incomplete operation (the third cause of our present mortality), is meant any method or route (however inviting) that prevents the complete removal of the infection, devitalized tissue and blood clots and the breaking up of all peritoneal adhesions. Those who have reason to know the possible dangers and dis-

tresses resulting from the imperfect cleansing of the peritoneal cavity, and the partial separation of peritoneal adhesions, will need no argument of mine to convince them of the superior advantages of the complete operation. Neither the pleas of the patient for a shorter period in bed, a concealed or ornamental scar, nor our own timidity, should tempt us to do incomplete work where life and health are at stake. The abdominal incision, abundant flushing, and no drainage, have proven, in my experience, essential to completeness.

Even if we concede to the vaginal operation every advantage that its advocates can fairly claim, it still lacks that most essential requirement—the opportunity for doing complete work—and hence I must believe that the employment of this route in such cases should be regarded as a substitution of an uncertain method for an established principle of surgery. Flushing is recommended because it is the only means of thoroughly cleansing the peritoneal cavity of blood clots and because it is very much less irritating than sponging.

Drainage is not only useless, but as it means a foreign body in the peritoneal cavity and is a producer of adhesions, its use is an infraction of two important rules that I believe should guide us in doing pelvic surgery. Moreover, it is known to be an occasional cause of permanent sinus.

The unwilling or neglectful patient is a factor in our present mortality, which can only be eliminated by the development of more trustful and confidential relations between the profession and the laity.

Those who are in sympathy with the thoughts expressed in this paper will agree that the tendency of modern surgery is inclined to magnify the importance of "manners and methods" and to underestimate all other factors of our successes and failures, and that in these days we need often to be reminded that the charm that clings about the doing of brilliant operations, made possible by easily acquired methods, should not tempt us to forget that all our real advances and substantial achievements must depend now, as they have in the past, not upon our own invention or blind imitation of methods, but upon our alertness in diagnosis and our allegiance to surgical principles, based upon and emanating from our growing knowledge of anatomy physiology and pathology.

ACUTE PNEUMONIA.*

By J. N. HALL, M.D.,

Professor of Medicine, Gross Medical College,

Denver, Colorado.

In order to study carefully this disease, as it appears in the non-mountainous regions of Colorado, I report tonight all of the cases of acute lobar pneumonia which I have seen in private practice since June, 1883. I have carefully excluded cases of bronchopneumonia, tuberculo-pneumonia, typhoid and hypostatic pneumonia, inflammations of the lungs from gunshot and other wounds, and from contusions, and several cases first seen at autopsy in making investigations for the coroner. Statistics regarding this disease are peculiarly liable to error if computed from hospital records, since many patients, broken down by age, by alcohol and by disease, end their days in hospitals with pneumonia. I have, therefore, excluded a greater number of cases seen in hospital and dispensary practice, amongst whom the mortality was probably larger. I only regret that the number of cases seen is not sufficiently great to permit us to draw more valuable conclusions.

The number of cases of acute lobar pneumonia which I report is 69. Of this number 42 were males, 20 females. In 7 babies the sex was not noted in my records, and I cannot at this time recall it.

The usual preponderance of right-sided disease was noted. In 41 cases the right lung was involved, in 25 the left lung, in 2 cases both lungs, and in one moribund case the side was not mentioned.

The whole right lung was involved twice, the whole left lung three times, right upper lobe 8 times, right lower lobe or lower and middle lobes 31 times, left upper lobe 5 times, left lower lobe 17 times, both lower lobes once, all of right lung and lower lobe of left once, site not noted once.

Of the 69 cases, 15, or 21.7 per cent., proved fatal, including the cases moribund when first seen, apparently about the usual average if we include all classes of patients. Of these, 9 died on the sixth or seventh day, 5 from third to fifth day, and 1 on the ninth day. The direct cause of death was probably diphtheria in 1 case, neglect and exposure in 2 cases, delirium tremens in 1 case and exhaustion, notably of the heart, in the others. In one

* Read before the Denver and Arapahoe Medical Society, Oct. 25, 1898.

man of 45, who had been a hard drinker, edema of the sound lung on the fifth day directly contributed to the fatal result.

That the disease depends much upon climatic conditions is apparent from the fact that during the first thirty-three months of the time but two cases occurred, while during the next thirty-two days eight cases developed. Such experiences have, however, probably occurred to all present.

In two cases the disease was of the abortive form. One man of 70 years had a sharp chill and rise of temperature, with decided dullness at the left apex and suppressed respiration. Cough and pain were severe. Within three days all signs and symptoms had disappeared, no complete solidification occurring. In a boy of 7 years, sharp pain, a temperature of 105.9, flushed cheek and contracted pupil on the left side, accompanied decided dullness in the left lower back, with suppressed respiration. On the morning of the third day the temperature reached normal and did not rise again, the signs and symptoms having disappeared.

In each of two families three cases appeared in succession, and one other patient had nursed a fatal case of pneumonia during the preceding week. Such instances point forcibly to the infectious nature of the disease.

The janitor of a school-house, who complained much of the irritating effect of the dust arising from sweeping, suffered two attacks, six months apart, one on the right side and one on the left, recovering from both.

In another case, a boy of 15, who swept a school-house, suffered from pneumonia of the left lower lobe, recovered, and has since developed tuberculosis, and recovered from this as well. In a second case of recurrence, the two attacks, three years apart, affected the right lower and middle lobes in each instance. In six instances the disease occurred in patients with pulmonary phthisis, or the latter disease occurred within one year afterwards. None of these were, in my opinion, instances of tuberculo-pneumonia, such cases not being included in this report.

In the case that died of diphtheria on the fifth day, the dullness, sharply confined to the left lower lobe, lessened decidedly on the fourth day. I suspect, nevertheless, that the pneumonia was caused by the same micro-organism which was responsible for the membrane in the throat. Two clear and undoubted cases of diphtheria, one fatal, occurred in the same household immediately afterward. As these cases occurred in 1886, we can only guess at the bacteriological condition.

It is interesting to note that the two cases brought from the mountains were nevertheless fatal.

In one case, resolution was delayed for more than six weeks, but finally the patient regained perfect health, and is still living, after twelve years.

Three of the patients are known to have used alcohol freely, and all died. One of these drank a quart of whisky in a few hours one February afternoon, lay out in the snow during a part of the night, developed delirium tremens and pneumonia, and died on the sixth day. No other case of delirium tremens was noted. One chronic insane patient died upon the third day of his illness.

One robust man of 27 had profuse expectoration of clear blood for one or two days, but made a prompt recovery.

Of the 69 cases, 9, with one death, occurred during the first five years of life, and 8, with one death, during the second five years. This proportion of cases of true lobar pneumonia in small children has been a source of surprise to me, although I long ago recognized that the disease is not at all infrequent in early life.

In the second decade there were 8 cases, all recovering; in the third, 14 cases, with 4 deaths; in the fourth, 10 cases, with 2 deaths; in the fifth, 8 cases, with 4 deaths; in the sixth, 5 cases, with 2 deaths; in the seventh, 2 cases, with 1 death; in the eighth, 4 cases, and the ninth, 1 case, all recovering.

It is very curious and unusual that all patients over 70 years of age should have recovered.

The highest temperature recorded was 106.4° in a fatal case, that of a feeble boy of 2 years. The highest temperature with recovery was 105.9, in a boy of 7 years, with an abortive attack.

The time of occurrence of the crisis was not noted with sufficient care in all cases, unfortunately, and, as the figures would necessarily be imperfect, I have not collated them.

One striking feature in three of the cases was that in each the attack occurred suddenly and with great severity while the patient was at a ranch far from help. In two instances the sick one was alone, and, delirium coming on early, he was unable to feed himself or keep up a fire. One of these, emerging from his delirium on the second morning, crawled to the stable and loosened all the horses, turned on the windmill that they might not suffer for water, and crowded back to his bunk to await his doom, since it was twenty-three miles to town. He was discovered by accident on the fifth day, but was moribund when I arrived. The second one was found at the end of sixty hours from his initial chill, and, passing through a severe attack, recovered and returned to work. Twenty-three days later he exposed himself to a cold storm, and died in a few hours, apparently of a severe con-

gestion of the lungs. The third one was cared for by his wife, but, through stupidity or ignorance, she did nothing for him, and being far from neighbors, told no one else of his illness. A neighbor learned of it toward the end of the week, but the patient was expiring on my arrival. These cases show distinctly the great danger of the disease, especially when delirium occurs early, to those who keep isolated ranches or other stations, since the patients are often either too delirious, or too weak, upon coming out of the delirium, to seek help.

The treatment of these cases has not been different in any way from that generally accepted by the profession. Stimulation with whisky has been freely used when needed, with opiates for pain and cough, generally free purging with calomel in the beginning, a cotton jacket, usually with camphorated oil or turpentine and oil, and a nutritious diet.

The known frequency of the pneumococcus in the sputum renders the occurrence of three attacks of pneumonia in two sweepers of school-houses of great interest, for one cannot but suspect that the dust of the school-room must generally contain pathogenic germs.

The study of these cases offers no reason for thinking that pneumonia upon our great western plateau is materially different from the disease in any of the region between us and the Atlantic.

TREATMENT OF INEVITABLE ABORTION.

By E. O. JONES, M.D.,

Murray, Utah.

Every medical man, who is engaged in general practice, must have been often surprised with the number of abortions he is called upon to treat. And if his practice brings him in contact with gynecological cases, he must have been struck with the disastrous consequences, more often remote than immediate, which entail upon the bad management of such cases.

In the text-books it is variously estimated that the proportion of pregnancies ending in abortion is from one in twelve to one in four, and that 85 to 90 per cent. of married women abort one or more times during their child-bearing period.

But statistics on this subject are of necessity incomplete and therefore unsatisfactory, for certainly far more cases of

abortion do not reach the knowledge of physicians and are not reported than go to make up the statistics.

Tabor Johnson, of Washington, says: "Our free dispensaries and charity hospitals afford innumerable examples of broken constitutions and ruined lives, which have had their sad beginnings in an improperly treated abortion. Frequenters of our gynecological clinics often state that the displacements or inflammations from which they suffer date back to abortions occurring three, five or ten years previously." And I can testify that this state of affairs is none the less common among the inhabitants of rural communities than among the frequenters of the city hospitals or dispensaries.

This being the case, and the welfare of women being so greatly involved in the issue, it is surprising that there should exist among authorities the wide divergence of opinion, in fact the absolute antithesis which their writings show in regard to the proper treatment of inevitable abortion.

In these remarks the term abortion is extended beyond the strict sense of the expulsion of the uterine contents prior to the third month of gestation, to include any time prior to the fifth month, for reasons which will appear later.

An abortion is considered inevitable if the hemorrhage is considerable and persistent, or there are increasing pains and the cervix is found softened and a cystic mass can be felt presenting at the internal os. Above all, when portions of decidua have been expelled; and I would also add, when it is evident that mechanical means have been resorted to induce an abortion.

The immediate dangers a woman encounters in an abortion are two, hemorrhage and septicaemia, but to these may be added those other, more remote, but none the less real and disastrous probabilities, subinvolution, chronic endometritis and metritis, increased size and weight of organ, uterine displacements consequent upon these, pelvic cellulitis and abscess, pyosalpinx, oophoritis, etc.

An abortion being inevitable, the indications to be met are agreed to by all, namely, to stop the hemorrhage and empty the uterus as soon as possible.

But as to the manner in which this is to be accomplished, two radically different methods are proposed and each vigorously advocated by authorities equally entitled to respectful attention.

By the expectant method, ergot is to be administered and the cervical canal and vagina packed with antiseptic tampons, to be removed from time to time, until the ovum has been expelled. Watch the patient the while for symptoms of danger, and at the first signs of septic import, empty the uterus at once.

By the other, the so-called active method, the proposition of Duhrssen is to be followed: To treat the ovum like a polypoid tumor, and so soon as the cervix is sufficiently dilated to introduce a curette, to incontinently clear out the uterine contents.

Now, if in following the expectant course of treatment the danger of sepsis is an actual factor to be reckoned with, as is tacitly admitted by all who advocate it, in the advice to watch the patient for symptoms of sepsis, and empty the uterus as soon as they supervene—why adopt such an unsurgical method? Why delay instrumental interference until that which is feared, if not certainly expected, has occurred?

The sort of sanctity which surrounds the gravid state, and the strong sentiment against the use of instruments in the puerperal uterus, should not blind us to the fact that we have here, not an obstetrical, but a gynecological condition, exhibiting the pathology of trauma and calling for the same rational surgical treatment that we should use in any other case where uterine hemorrhage and expulsive pain are the prominent symptoms.

The proposition that nature will best take care of these conditions is not rational, because the very fact of abortion is a confession on the part of nature of her inability to do her work properly, and whether in criminal abortion, with mechanical injury, or in abortion from pathology of foetal or maternal tissues, nature is taken at a disadvantage with none of her uterine forces in proper shape.

Reference to the anatomy of the uterine mucosa during pregnancy will demonstrate this fact. Beginning with pregnancy, a series of changes are initiated in the mucous lining of the uterus, which consists primarily in proliferation of the epithelium and the glands, the latter becoming greatly enlarged both in size and in the number of tubules, the increase involving particularly the deeper parts.

Now, subsequently, at about the fifth month of gestation, the pressure exerted upon this hypertrophied tissue by the rapidly growing embryo and its surrounding structures induces atrophy and degeneration of the outermost parts of thickened uterine mucosa, which becomes the stratum compacta of the decidua, the balance being the stratum spongiosum. Now, by this stratum compacta nature provides what might be termed a zone of cleavage at which the placenta at term is separated from the uterine wall. But an ovum expelled by uterine contractions prior to the formation of this zone is more than likely to separate at the line of junction of the chorion and decidua, by reason of the fact that the ramification of the chorion villi have not as yet completely penetrated the substance of the decidua, rendering them as one homogeneous tissue.

Thus, the abortion leaves within the uterine cavity the soft, blood-filled decidua, which can be in no wise compared to the thin paper-like decidua at term, and which renders the woman peculiarly liable, not alone to sepsis, but to recurring hemorrhage, and all that train of secondary dangers which have just been mentioned.

So it is the exception and not the rule when nature conducts a case of abortion as successfully and as well as the intelligent physician can do.

At a meeting of the New York Obstetrical Society, Nov. 15, 1895, A. M. Jacobi reported a case of early abortion which he had recently attended, and which I introduce here for the sake of the discussion which followed. The patient was suffering from severe hemorrhage when he saw her, and being sure of his diagnosis and not believing in tampon, he made a thorough curettage, and hemorrhage and pain ceased at once. The doctor exhibited the specimen which showed the ovum and membranes intact, and proved that the sharp curette was in careful hands, attended with no such danger, as generally feared, of perforation of the uterine wall. The immediate success and subsequent good history of the case illustrated beautifully, says the report, that the proper treatment of abortion, whether early or late, is immediate curettage and emptying of the uterus.

In the discussion which followed, Dr. Brooks H. Wells said that as long as there was any decidua in the uterus, the patient was liable to develop sepsis at any time. The ovum might come away while the membranes remained, the patients go on to bleed and get up the very condition which had been mentioned as occurring after curettement, namely, a hyperplastic endometritis. He had seen that occur in a number of cases where nothing had been done but follow the expectant treatment. In fact, a large proportion of women suffered afterwards from some trouble directly traceable to the abortion. But where curettage had been done carefully, skillfully and antiseptically, with the sharp curette, he had never seen any harm come from it.

Dr. Thomas said that when there was no doubt about the impending abortion, and the miscarriage lingered, as often happened, nature doing her work very poorly in these cases, he thought it was a good practice, and his experience had confirmed him in this view, to go ahead and hasten matters; dilate the cervix and remove the ovum, clearing out the uterus by curettement.

Dr. Florian Krug stated that a number of years ago he had seen a great many cases of abortion, which he did not feel himself called upon to treat surgically, and the patients made a perfect recovery as far as temporary results were concerned. It

was true, however, that a number of them had subinvolution and required curettement afterwards. He had treated all his cases of late years by dilation and curettement.

Dr. Charles Jewett said his experience had been that cases of abortion, which had not been touched at all, provided the decidua alone remained, generally did well without curettement. He did not know, however, how one was to assure himself the decidua was the only thing left unless he had an opportunity to examine the entire ovum. Therefore he would prefer to curette and make sure of the condition of the uterus.

While, on the other hand, Mundé says: "The future safety of the woman demands that the secundines be at once removed after the expulsion of the foetus, in every case in which removal can be accomplished without force sufficient to injure the patient."

At a meeting of the Section on Obstetrics and Diseases of Women, of the American Medical Association, held in Philadelphia, in 1897, Dr. Henry P. Newman of Chicago read a paper on the treatment of inevitable abortion in which he forcibly advocated the active method.

The discussion which followed brought out many contradictory opinions on the subject.

Parvin strongly deprecated the tendency to resort to the curette in every case of abortion, believing that more harm resulted from the curette than from abortion. He preferred to rely upon ergot and tampons, trusting to nature to expel the entire uterine contents.

Hirst was equally emphatic in his endorsement of the active treatment, believing that we but invite the danger of sepsis by waiting for the expulsion of the uterine contents.

Dr. C. C. Fredericks, of Buffalo, favored the careful use of the curette in cases of abortion.

Dr. J. Henry Carstens, of Detroit, said that he varied his treatment according to how the abortion was produced. If due to natural causes, he believed in allowing nature to expel the ovum, but if induced by mechanical means, he would clear out the uterine contents at once, in order to obviate the almost certain danger of sepsis.

For a concise statement of the views of foreign teachers, I am indebted to Hirst's system of obstetrics by American authors.

In France the more conservative course is almost universally adopted. Tarnier speaks quite strongly in favor of non-interference even when the whole placenta is known to be in the uterus. He points to the statistics of the Charité and Maternité in which he saw forty-six cases of the retained placenta after abortion, with only one death, and that from pneumonia.

But, on the other hand, statistics of the hospital in Florence, in which the same plan of treatment is pursued, shows a mortality after abortion of 6 per cent.

In Germany, the majority lean to a more active treatment. Schroeder advises the removal of the hypertrophied decidua of the early months of pregnancy with the sharp curette.

Fehling and Schwartz are warm advocates of the active method.

Brown rather deprecates the employment of instruments in these cases, but advises the use of the finger wherever possible, to remove the ovum. Dorhn, on the other hand, carries the expectant plan of treatment to its farthest limits, and Winckel attempts no active interference.

If the retention of the decidua, foetal membranes or placenta after an abortion is fraught with danger to a woman, as practically all admit, the question may be asked, is the immediate removal of the uterine contents after an abortion necessarily a violent or dangerous procedure?

This question can best be answered by those who have adopted this plan of treatment in a careful and judicious manner.

Duhrssen has reported 150 cases of abortion, treated by a thorough and immediate cleaning out of the uterine cavity, with two deaths, and these in no wise attributable to the treatment adopted.

Hirst states that he has used the curette in many cases of abortion and has never seen the slightest ill effects from it; on the contrary, the treatment has proved invariably beneficial, and Munde's results as given by him are entirely similar.

In my own practice, when I am satisfied that the loss of the ovum is inevitable, it has been my custom to proceed at once to empty and cleanse the uterus.

Before doing this I always thoroughly scrub and cleanse the vulva, vagina and cervix, relying principally upon the tincture of green soap, which I have found to be a most efficient antiseptic. Usually I administer an anaesthetic, but in a number of cases where the cervix has been sufficiently dilated for the introduction of a curette, I have been able to make a thorough curettement without its use, with equally good results. Where dilation was necessary, I have, in some cases, made use of the rapid dilators, and in others of tampon of the cervical canal, the method used depending upon the exigencies of the case—exigencies which arise from the peculiarities of a country practice. Where the woman resides at such a distance from my office that it is impossible for me to wait for the action of a tampon, I always use the rapid dilators and have never seen any ill effect therefrom. Rapid

DENVER MEDICAL TIMES.

dilation is effected with much less difficulty in the pregnant than in the non-pregnant uterus, and is attended with much less trauma.

With the patient in the lithotomy position, and with the uterus slightly drawn down and steadied with a volsellum, the curette is manipulated with the right hand, while the left hand holds the fundus firmly through the abdominal walls. In this way the netire cavity may be thoroughly scraped and any danger of perforation obviated. I prefer to use the large, spoon-shaped curette of Recamier, which is more satisfactory than the ordinary sharp curette. I have used the finger to clear out the uterus, but it has never been as satisfactory as the curette, and besides one can never feel so certain that the finger is sterile, as we can with the curette.

After scraping the uterus thoroughly, the cavity is flushed out with a 2 per cent. carbolic acid solution, but I believe that boiled water would do quite as well, as the effect is wholly mechanical, serving to wash out small fragments that have been loosened, but not removed, by the curette.

I have not resorted to packing the uterus after curettement, for if one does his work thoroughly and is strict in his antisepsis, hemorrhage will not follow, and for purposes of drainage gauze is useless, if not an actual detriment. In cases where there was a beginning of sepsis I have swabbed the uterus with 95 per cent. alcohol, with, I believe, good results.

The after treatment consists of rest in bed, the administration of mild salines and the use of occlusive vulvar pads of salicylated cotton.

Antiseptic douches have always seemed to me to be a useless adjunct, if the curettement is thorough, and, if left in the hands of ignorant persons, they may be a source of danger.

As for the results, my case records for the past five years give the histories of forty-six cases of abortion treated by immediate curettement, with no deaths. In none of the cases was curettement followed by any serious hemorrhage, although in a number hemorrhage was quite severe before. In thirty cases the subsequent temperature never rose above the normal. Of the remaining sixteen, the highest emperature registered was 101°. This occurred shortly after curettement, in a case where the abortion had been brought about by the introduction of a catheter and septic matter undoubtedly carried with it into the cavity of the uterus. The temperature, however, rapidly declined.

In twenty cases I have been able to follow up their subsequent history long enough to state that none of the remote consequences of abortion have occurred.

Twenty cases I have lost track of since the abortion, and the remaining six have occurred so recently, during the past three months, that the time is too short to assert that they will escape all the evil consequences of an abortion, although at present they are all in good health.

Five of the women included in this list of cases I have since delivered of well developed children, born at full term, and each enjoyed a perfectly normal puerperium.

SURGERY IN COUNTRY PRACTICE.

By M. S. CHENOWETH, M.D.,

Denver, Colorado.

An interchange of thought and a comparison of results is always conducive to the advancement of our profession. The man who never reads the journals, much less contribute to them, is retrograding or rather allowing the procession to leave him.

The physician who is "good in fevers," another who is supposed to be "a good surgeon," or a doctor who never does surgical work, all belong to a class who lack efficiency. The busy practitioner is not supposed to remember the origin and insertion of every muscle of Hesselbach's or Scarpa's triangle, though if he ever operated intelligently for hernia, he is competent to do so again, when occasion requires. He does not need to be a technical anatomist, but there is no excuse for not being a practical one. If there is any place in the world where a physician should be an all-around man it is in the country, and yet there is a proneness to the very reverse of this. The physician who practices medicine in the country village, with a small-sized pocket case to represent his stock of surgical instruments and appliances, and passes as a straight practitioner of medicine, forty miles from assistance, will stand by the bedside of a patient with an irreducible hernia, watch the development of gangrene and death, looking as wise as a wooden owl; or see urine extravasated in certain strictures from pubis to sternum through ignorance and neglect without giving relief. These things are almost as bad as the doctor who allowed a patient to die from post-partum hemorrhage, while burning a bucket of chicken feathers under her bed to check the flow of blood, forgetting, as he said, until after the woman was dead, that he should have used "dominic feathers."

Nearly all of my practice has been in the country district, and any man who has spent ten years in country practice has a great many amusing, as well as instructive incidents, to remember. Over-zealousness is, we know, sometimes the author of too much surgery; though one should always remember dangers of delay and avoid criminal neglect of duty. Along this line I desire to report the following case, believing that there are some interesting points connected with it, and one which illustrates how non-interference is sometimes as much to be condemned as anything else.

About the first of January, 1897, Laura B., aged 13, while playing at school was struck by her brother in the left inguinal region with a snow-ball. There seemed to be nothing thought of it at the time, as there was only slight soreness at the point of injury upon pressure. I saw her three days after and applied turpentine stupes over the tender area, gave anodynes and confined the patient to bed on a mild diet. The bowels were constipated and I gave two one-grain doses of mild chloride of mercury, which caused a gentle purgation. During the next two or three days there was transient fever, alternating headache, furred tongue, and the case at once lapsed into a typical typhoid fever, so far as external symptoms were concerned, running a rather mild and abbreviated course, so that on February 1st I ceased to visit her, though I left instructions for some of the family to see me every day or two until she was fully recovered. She was now able to be up and around the room.

On February 3 her brother came to me for some medicine to relieve, as he described it, a "bloated" condition. Not being satisfied what condition to prescribe for I concluded to visit her, which I did with but little delay. I found her suffering no pain except from dyspnea; temperature but slightly above normal, and pulse rapid and thready. The "bloating" was considerable. Palpation at once revealed the abdominal cavity as full of fluid as it was possible to be without rupturing, and instead of being a dropsical effusion, as one would suppose, aspiration with a hypodermic syringe revealed viscid, foul-smelling pus. As soon as I could return to Elbert and prepare for it, I returned with Dr. R. H. Danney, who administered the anesthetic, and I opened the belly from umbilicus to symphysis pubis, washing the abdominal cavity with hot bichloride solution several times. I stitched the wound with silk braid, inserted a large rubber drainage tube, through which I flushed each morning with hot bichloride solution until all trace of odor and discharge had ceased, when I allowed it to further heal by granulation. There were no adhesions and I never succeeded in finding a focus other

than a general supuration of the peritoneal cavity, without the appearance of much inflammation or pain, and yet when the cavity was opened pus of all shades and smell poured out until it filled a common washtub one inch deep all over the bottom. I met the child's father a few days ago in Denver and learned, from her sister also, that Laura is in the best of health and going to school. This, I am sure, was a case that could have been allowed to die in the country and the physician have been credited with having done everything possible to cure a "hopeless case." No criticism or reflection is intended for the country practitioner by this article—especially among my acquaintances, for I certainly have had a most intelligent and congenial class of competition.

THE RATIONAL TREATMENT OF HIGH TEMPERATURES.

By E. B. JACKSON, M.D.,

Houston, Texas.

Hyperpyrexia is frequently seen in cases of pyaemia, rheumatism, malarial haematuria, pneumonia and so forth. Those who have observed high temperatures in a sufficiently large number of cases to make a table of comparative deductions, will readily agree that the most formidable predisposing element is nerve depression, which is invariably present in cases of hyperpyrexia. Now when there is loss of nerve tension—delirium—a "giving way," so to speak, of the nervous system, hyperoxidation, as every one will admit, at once occurs, and it will progress commensurately with the invalidity existing in the nervous centers, and it will not cease until the restraint exercised by a tense nervous system becomes re-established.

If the restraining influence of nerve tension becomes obliterated by intense thermic conditions—say insulation for instance—or by the chemical reactions of violent poisons—say, for instance, certain streptococci and their toxalbumens in the blood—or by the overwhelming production of the malarial haematozoon, reaching fully the stage we recognize as "toxaemias" or "malarial intoxication," with coma; temperature 107, and see the concomitant symptoms of pernicious malarial haematuria, we say that hyperoxidation and its congener hyperpyrexia will continue until nerve force becomes re-established or until death ensues.

It is not quite well understood why hyperprexia is so liable to occur in these diseases, but it is at least reasonable to suppose that it is in great measure due to the paralyzing influence of some special factor acting directly on and through the nervous system, while a correct diagnosis, including the recognition of predisposing and exciting causes, is of course necessary, looking to the ultimate cure of the case, the first measures to be considered are those tending to furnish instant relief.

It matters little what the agencies are when the patient lies before us with a temperature of 107 or 108—i. e., it is a secondary consideration. First of all consider the means of liberating the caloric. It must be done in minutes, not in hours. Instantly! Else hyperoxidation will soon claim the lungs, heart and patient. There is no time whatsoever for internal remedies of the character of coal tar derivatives, aconite and so forth; besides, such drugs reduce the heart's force, thereby in a measure weakening the brain and body. They combat high temperatures only in this manner, namely, by rendering vital force inert; the physical economy is therefore made partially impotent to produce heat and of consequence therefore the products of combustion and hyperoxidation are pent up in the patient's veins and viscera. Elimination is in abeyance. It is not so with the cold bath. Cold water is a great stimulant to the nervous system, one of the most powerful we possess. It gives tone and renders vigor to failing nerves, and by its opposing force it chemically counteracts the heat already present and without squelching elimination. It is thus two-fold in value, highly scientific and should always be instantly applied.

Now, the next step is no less important. Its immediate application is demanded. It is in the direction of counteracting the poisonous ferments in the blood, bringing it back from an alcoholic to an alkaline media—adding still further to the protection of nerve tension, on the hypothesis that hyperoxidation must be restrained through the nervous system. To successfully squelch ferments in the blood, an antiseptic of some character is required. It must be hypodermically administered in order to reach the seat of disease instantly and precisely. To brace fogging nerves requires the administration of a restorative, and for that purpose nothing is superior to kola.

Sulphoborate of zinc is a prompt, reliable and energetic antiseptic, quickly relieving the blood plasma of fermentescible matters, thereby rendering it an unfit fabulum for the elaboration of bacteria; in its presence colonization of microbial bodies cannot occur. It is a well known solvent of altered albuminoid molecules and when it reaches the plasma it vigorously attacks

disease, ferments and must of necessity thus reach the origin of febrile movement. The combination of kola and sulphoborate of zinc (Viskolin) is obtainable in liquid, tablets and powder form. We have observed most beneficial results from the use of ten minims of the sterile fluid (Viskolein) hypodermically in many conditions of hyperpyrexia. We have seen the brain clear up in two hours, ideation restored in three hours, and mental exercise made possible in six hours and patients always more comfortable the next morning succeeding a night's rest and sleep.

When delirium is relieved, and Viskolein in my experience is virtually a specific; hyperpyrexia (in accordance with the law of hyperoxidation being preceded by lost nerve tension) ceases. Our course in the administration of Viskolein in many cases of rheumatism, pyaemia, typhoid, pneumonia, malarial toxæmia, etcetera., has been simply this, namely: Ten minims of the solution in an equal quantity of sterilized water administered hypodermically every eighth hour. The tablets and capsules of powder form may be given alternately every two to four hours until the febrile movement is under complete control.

REPORT OF CASE I.

Miss O., age 15; acute rheumatism; was called the second day after the inception of the disease; patient prostrated, completely helpless; sour sweat pouring out of the body; great pain in both shoulder and elbow joints; intensely acid urine and fever ascending a fraction every hour. Ten minims of Viskolein were given hypodermically; the joints were well rubbed with equal parts of hot olive oil and laudanum, and bandaged with cotton wool; castor oil given in sufficient quantity to cleanse the alimentary tract of scibalæ and soft detritus; Viskolein repeated every six hours in ten minim doses hypodermically.

The fever was halted at the mark where it was found on the second day. It usually gradually goes on up much higher, i. e., much higher than in this case, 102.5 F., therefore it is but reasonable to suppose that the immediate checking and gradual abatement of the pyrexia, which soon ensued, was due in greatest measure to the benign influences brought to bear by Viskolein, namely, its soporific and bracing effect on the nervous centers and its active aseptic and antipyretic effect upon the general column of blood. Within five days the febrile movement had become tranquillized and the patient was thereafter convalescing, but completely recovered within three weeks. Viskolein was in this instance given hypodermically in ten minim doses four times a day for four days.

CASE II.

Mrs. M.; married; two children; last child, infant six days of age; mother in grave, septic state; hyperpyrexia, 106.7; abdomen swollen enormously; septic diarrhoea; perspiration pouring out of body; brain dull, mind blunted; respiration wild; picture of depression and misery. Ten minims of Viskolein was given and repeated in one hour; in the interim the womb was curetted with a dull wire instrument and lavaged with solution of potassium permanganate; poultices of linseed meal and turpentine stupes applied. Ten minims of Viskolein was given every four hours for two days and nights, at the expiration of which time the mind was clear, the temperature 101.3; tympanites greatly reduced; lochia re-established; the surface of the body dry and warm and the patient generally comfortable. We believe in this case that this prompt salutary impression on the disease was due in greatest measure to the sustaining power of Viskolein on the brain, and to its solvent, neutralizing, immunizing and eliminative action, when brought in contact with fevered and infected blood.

THE PROPER METHOD OF DRESSING THE NEW-BORN INFANT.

By PROF. B. C. HIRST,

Professor of Obstetrics, University of Pennsylvania,
Philadelphia, Pennsylvania.

The importance of knowing how to dress the new-born infant rightly cannot be too greatly emphasized, and yet, strange as the statement may seem, the average physician knows practically nothing of the correct clothes the baby should wear. This statement applies not only to the doctor fresh from college, in whom the shortcoming might be excused, but it applies also to many of the older practitioners. It should be the infallible rule of every physician never to leave this important matter even to the discretion of the mother, much less to that of her friends. A firm stand should be taken by the attending physician on this subject, not only in justice to the mother of the child, which includes the welfare of the child, but also in justice to himself.

As can easily be seen, a child may be delivered correctly, with everything else done correctly and at the right time, and yet from the want of proper clothing even unfortunate results

may occur. It is a well known fact that the average woman, about to be confined, is showered with presents by her friends, in the shape of everything from pairs of socks to rubber nipples. Because the majority of these presents are practically useless is no reason why this pretty custom should be discouraged. In fact it might be very unwise for the physician to take such a stand at such a time, on account of the peculiar mental condition of his patient, for, if ever in their lives, women are extremely sensitive at this trying time. However, the physician can exercise a wise discretion in these matters; he can be on guard to see that certain garments, so often given a mother under these circumstances, should positively not be used. For example, a very common present is a pair of embroidered socks; they are always made of silk. They should never be used, excepting to decorate the "baby basket." The baby's socks should always be made of wool.

Coming to the practical details of the different articles of clothing which should be provided for the infant, there should come, first of all, four to six dozen diapers. At first thought this may seem to be too great a number, but when the exigencies of the case are considered it will be found that this number will be a source of great comfort. It will be found that there will be none too many. Next it is important, in fact the most important matter concerning the dressing of the infant, that all the baby's skirts are to be made with waists, so as to have the weight of the clothing fall upon the shoulders; they should never be fastened around the child's waist by means of bands. These bands are very common in use yet, but their uselessness can easily be seen on investigation. The worst feature is the production of a constriction of the chest, which does not allow room for the child's stomach and chest to expand. This is especially the condition over the stomach. A baby's stomach is very small; in fact, it is very much smaller than the average individual imagines, and a very little food causes it to swell out greatly. Therefore, for health, the child must have plenty of room.

Next there should be six to ten slips ordered; also six dresses and material for fine flannel bands. Next a soft pillow (14x18) and a soft pillow cover. Then should come knit wrapping blankets and sacques, wrappers, bibs, caps and blankets. As regards the caps, more care is needed concerning the protection of baby's head than might be supposed. Babies have very little hair and the colds so often noticed in babies' heads come almost entirely from the changes in the atmosphere. At first the baby should wear a linen cap, even in the house, no matter how hot the weather.

The following is the contents of the "baby's basket," which I always order:

Large and small safety pins.
Talcum powder, box and puff.
Soft sponges.
Soft brush for hair.
Castile soap.
Cold cream.
Alcohol for rubbing child.
Blunt scissors for nails.
Old linen for cleaning mouth.
Soft towels for bath.
Bath blanket.
Wooden frame for drying socks.

TWO RARE CASES OF PELVIC CYST, WITH REMARKS ON MYOMECTOMY.*

By E. C. DUDLEY, M.D.,

Professor of Gynecology, Northwestern University Medical School,
Chicago, Illinois.

I have for your consideration two cases in which two tumors, both apparently springing from the uterus, and each occupying the space between the folds of the right broad ligament, were removed. I shall not enter into a detailed description of the operations, but briefly describe certain points in pathology and operative technique which were peculiar to each case.

Case I.—Age, 60; menopause at 51. The most significant factors in the history were chronic rheumatism, general arterial sclerosis, hypertrophy of the heart, occasionally a faint trace of albumen in the urine, and, as diagnosed upon these manifestations, chronic interstitial nephritis.

Conjoined recto-vaginal examination disclosed a semi-fluctuating, immobile mass in the right side of the pelvis minor. There was from this growth great distress and steadily failing health.

Operation.—At St. Luke's hospital, November 16, 1898. Abdominal incision four inches long. A degenerated cystic tumor, size of a child's head, apparently springing from uterus and occupying the space between the folds of the right broad

* Read before the Chicago Medical Society, Jan. 11, 1899.

ligament. The removal of this tumor by enucleation was most tedious and difficult. During enucleation the cyst ruptured and some thick, chocolate colored fluid escaped. The small, senile uterus, which was inseparable from the cyst, was also removed with it. A continuous strip of gauze drain was packed into the space between the folds of the broad ligament from which the tumor had been removed and brought out through the vagina. This controlled bleeding from many points which could not readily be secured by ligature. No abdominal drain.

On the third day the patient died comatose. No autopsy could be obtained. All indications pointed to uremia as the cause of death.

Pathological Findings.—On culture the fluid gave negative results. Microscopic examination showed the growth to be adeno-cystoma. The gross indications were that the tumor originated in the uterus and thence developed into the broad ligament. Its connection with the uterus was too intimate to be explained on the supposition of an extra-uterine origin, and subsequent uterine adhesion. It may have been originally an adeno-myoma of the variety described by Recklinghausen and later by Ries, and may therefore have originated in a remnant of the Wolffian body. If this be true, the myomatous elements had disappeared, leaving a pure adenoma. The specimens and microscopic sections are before you for inspection. The cyst wall shows signs of malignancy. A pure adenoma springing from the outer wall of the uterus is at least rare and interesting.

Case II.—The patient came to me in November with the history of an operation for the removal of a uterine myoma eighteen months before. The wound had suppurated and did not completely heal, and about six weeks after the operation pus had appeared per vaginam. Fever and chilly sensations had continued for eight or more weeks after the operation. Abdominal and vaginal sinuses discharging variable quantities of pus and at times feces have persisted and were present when she came under my care. Examination disclosed a tumor in all respects apparently like the one just described.

Operation.—November 19, 1898. As in Case I. the firmly embedded cyst was enucleated from the space between the folds of the right broad ligament. The abdominal and vaginal sinuses both communicated with this cyst. At one point it was apparent that a communication had once existed between the cyst and the bowel, but the opening had closed by cicatrization. In the enucleation of the cyst care was necessary not to re-establish this opening. The sinus connecting the cyst with the vagina was enlarged by free incision for purposes of vaginal drainage.

As in the previous case, a long, continuous gauze drain was packed into the space from which the tumor had been removed, and brought out through the vagina. The edges of the two folds of the broad ligament were then united over this packing by a whip stitch, and thereby the field of operation was rendered extra-peritoneal. The abdominal wound was closed without drain. No part of the uterus or its appendages was destroyed. At the end of a week the vaginal gauze drain had been gradually removed. The patient made an uninterrupted recovery.

On microscopic examination the tumor proved to be a fibro-cryst. It probably originated as a myoma and through degenerative changes lost its muscular elements and became cystic. The contents of the sac was purulent and swarming with pneumococci. I have here for your inspection the gross specimen and two microscopic slides, one showing the pneumococcus and the other the structure of the growth. The pneumococcus slide furnishes an excellent demonstration of that germ. I am not aware that any case has hitherto been reported of uterine fibrocyst with pneumococcus infection.

These two cases are not only somewhat rare, but they illustrate the great developmental and structural differences which may exist between two specimens of like gross appearance.

In connection with this subject I wish to say a word for conservative surgery in myomectomy, and in so doing I quote liberally from a former writing. The removal of the myoma and the preservation of the uterus, with or without utero-vaginal drainage, is coming to be more and more the operation of election. Eleven years ago I reported a case of myomectomy by abdominal section and drainage from the interior of the uterus into the vagina. In this case no portion of the uterus was removed. Since that time Senn, Kelly and others have, in many cases and with various modifications, made use of the same principle, until now the conservation of the uterus in myomectomy is not only an established, but bids fair to become a frequent, operation.

Intramural tumors, even though quite large, may often, with the greatest ease, be shelled out of their beds, the uterine wounds successfully closed and the abdomen closed without drain. The tumor cavity, if not too large, may be obliterated by closure with numerous interrupted or continuous buried cat-gut sutures, and finally the peritoneal margins of the uterine wound may be united by a close row of rather deep Lembert sutures. During the enucleation of the tumor and the closure of the uterine wound, hemorrhage is controlled by a temporary elastic ligature around the cervix uteri. Before closing the ab-

dominal wound this ligature is removed, and a little time is allowed to make sure that there is to be no more hemorrhage from the uterine wound. Hemorrhage is usually in a great measure controlled by the uterine contraction which follows the enucleation. The mortality of this method for small tumors, in which the traumatism is slight, is surprisingly small.

In case of a large tumor, and consequently of large traumatism with enormous surfaces to be united by buried sutures, closure of the uterine wound involves too great danger of sepsis, and the technique should be modified as follows: After the tumor has been shelled out from the uterine wall an opening is made directly from the tumor cavity to the uterine cavity. If the uterine canal is patulous, a continuous strip of gauze is carried from the tumor cavity directly through the uterine canal into the vagina, and the tumor cavity packed with the same continuous strip. The temporary elastic ligature around the cervix does not interfere with the introduction of the gauze. The uterine wound is then closed, as above described, by buried sutures and deep Lembert sutures of catgut. The peritoneal margins of this wound, thus turned in and united, rapidly grow together, and the whole uterine traumatism, now isolated from the peritoneum, is adequately drained through the vagina. No abdominal drain is required. If the uterine canal is not sufficiently patulous, it may be dilated or bilaterally incised by means of a herniotomy knife, or it may be both dilated and incised. The vagina is loosely filled with gauze to meet that which protrudes from the uterus; an absorbent vulvar dressing, to be changed as often as it becomes moist, completes the capillary drain. The gauze is removed in two or three days. Care is necessary in the closure of the uterine wound that the gauze be not caught in a suture, because then its removal would have to be postponed until after the absorption of the suture.

As shown in the two cases reported, the same principles will apply also to an intraligamentous tumor. The intraligamentous myoma may be shelled out from its bed between the folds of the broad ligament. The same mode of drainage may be used as in the case of intramural tumors, except the route of drainage. This should be not through the uterine canal, but through an opening which is readily made from the tumor cavity to a point in the vagina just back of or in front of the uterus. In exceptional cases it may be necessary, for purposes of haemostasis, to ligature the ovarian or uterine arteries or both. Experience has shown that sloughing of the uterus from thus cutting off its blood supply is not to be feared.

Intra-abdominal closure of the uterine wound and vaginal drainage of the tumor cavity was early suggested by August Marin of Berlin, but this surgeon appears not to have developed or practiced the method extensively.

My own experience during several years with the above technique shows: First, almost entire freedom from mortality; second, prompt and uneventful recovery; third, the most gratifying permanent results.

The method is undoubtedly applicable to a much larger number of tumors than is generally supposed. Any surgeon who is constantly alert to enucleate the tumor and preserve the reproductive organs will be surprised at the number of cases in which this is entirely feasible. The mutilating operation of hysterectomy for myoma is often necessary, but not so often as the statistics of the present time would indicate. A few weeks ago I enucleated thirteen myomas from the walls of a uterus, repaired the uterine wounds thus made and left the organ entire. The result was perfectly satisfactory.

In the vast majority of cases the uterine appendages will be found normal, and in a large proportion of the majority the tumor may be enucleated from the uterus and the wound successfully closed, precisely as would be required for the removal of such a tumor from any part of the body. Cases of very large tumors and cases in which many small tumors are scattered through the uterine wall may require hysterectomy, but the conservative operation of simple enucleation will often apply when the tumor is even larger than the foetal head, and in cases of multiple myomata even when there are several tumors. In one case, fifteen years ago, I removed a forty-five pound myoma and preserved the uterus. This specimen before you must weigh over twenty pounds and yet the uterus was not destroyed. The tumor cavity from which it was enucleated was drained through the vagina.

MEDICAL PROGRESS.

Advances in Our Knowledge of Typhoid Fever.

Since the sad experience of our troops at home and abroad last year with typhoid fever, medical interest in the disease has been, if possible, even more keen with regard to everything pertaining to it than before. The spring time nearly always witnesses a recrudescence of the disease in various parts of the

country, owing to the fact that the melting snows and the spring freshets carry down with them into the water supplies of towns a certain amount of infective typhoid material that has been accumulating during the winter months. Typhoid is one of those diseases of which the practitioner is apt to think that "there is nothing new under the sun," at least, nothing new that has a practical application or is of value in the prophylaxis or treatment of the disease. A glance, we think, at Dr. Taylor's article on "Typhoid Fever" in *Progressive Medicine*, the new quarterly review of medical progress, edited by Professor Hare,* is apt to disabuse one of any such unprogressive notion.

With regard to prophylaxis of others during the treatment of a case of typhoid, these noteworthy recommendations from a French source are given: (1) Isolate patients suffering from typhoid fever, or at least do not permit them to be treated in a room or ward containing young people who have not previously had typhoid. The warning contains some wholesome advice too often neglected, and sometimes with sad results, because we are persuaded that typhoid is not an air-borne disease, and forget that contiguity favors infection because precautions will inevitably sometimes be neglected. (2) Nurses for typhoid cases should, if possible, be only such as have typhoid themselves. In a family the young people should be removed. (3) The floor of the sick room should be oiled, so as to be impermeable. Carpets and rugs should be removed, and the raising of dust should be avoided by frequent use of a cloth dampened with antiseptic solution. (4) The nurses should wear linen clothes, which they should remove when they leave the sick room, and in general they should be warned to be circumspect in their relations with others, and especially careful of the utmost details of antiseptics in the matter of the preparation of food and drink for themselves and others.

The review of the question of typhoid infection from oysters is full and conclusive. The possibility of typhoid infection through salads is made clearly apparent, manure being used in bleaching the plants and gardeners being careless in handling it and washing the plants in any sort of water, or sprinkling them with infected cistern water.

The strikingly practical features of this excellent review of the recent literature of typhoid, are the discussion of the question of typhoid without intestinal lesions, and of its corollary that intestinal lesions, even when existent, often play a very

*"Progressive Medicine," a Quarterly Digest of New Methods, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by H. A. Hare, M.D. No. 1, March, 1899. Lea Brothers & Co., Philadelphia.

minor role in the disease. How important these questions are for the matter of treatment is clear at once. All the so-called abortive methods of treatment, all the much-lauded systems for securing intestinal antiseptics, all the many drug formulae and combinations that have been enthusiastically recommended for the treatment of typhoid, assume that the essence of the disease is the intestinal lesions. This is a notion that must disappear before scientific advance of our knowledge of the true nature of the disease.

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Be kind to every feller;
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Be brave to battle with the strife,
Be true when people doubt you:
Don't think that money's all in life,
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—*Atlanta Constitution.*



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EDITORIAL DEPARTMENT.

The Number of Physicians According to the *Pacific*
in California and Ontario. *Record of Medicine and*
Surgery, California, with a
population (1890) of 1, 208,310, has 3,535 practicing
physicians, while Ontario, with about two millions
people, has only 2,427 physicians. This great difference
is ascribed to the fact that in the Canadian province an
official examination is required preliminary to practice,
while in the state mentioned any graduate may be
registered to practice.

Traction of This method, so frequently employed
the Tongue. during anesthesia, is not without danger
if sufficient traction is applied to draw
the tongue out at the angle of the mouth, says Geo. W.
Crile in his Senn prize essay (*Cleveland Journal of*

Medicine, February). From a number of experiments on dogs he discovered that forcible traction causes reflex inhibition of the respiratory and cardiac action, varying from a slowed action to complete arrest. He concludes that the action upon the heart is due to vagus stimulation by dragging upon surrounding structures, and that the effect upon the respiration was doubtless a result of mechanic stimulation of the superior laryngeal nerves.

Transverse Fracture of the Femur without Symptoms. Ap Morgan Vance exhibited before the Louisville Surgical Society (*Louisville Journal of Surgery and Medicine*, February) a young man who ten weeks before, while riding a bicycle, fell and struck his thigh against a stump. He remounted his wheel in a few minutes, rode home and went to bed. At the end of three days his leg was much swollen and very black, so he walked to a buggy and consulted a physician, who advised him simply to remain quiet for a while. The patient did so for two weeks, when he got up and commenced riding his bicycle again. In another week he resumed his work in a machine shop. Shortly thereafter he came to see Dr. Vance about a hard swelling of the injured thigh, which proved upon examination to be a callus, with some overriding of fragments, due to a transverse fracture. Union was perfect in spite of the fact that no splint had been applied.

The Dosage for Children. With the exception of opium and its alkaloids, larger doses may be given than are usually stated, says Dr. J. B. McGee in the *Medical Standard*. Paregoric is the safest of thebaic preparations, one drop for each year. Belladonna is exceptionally well tolerated and may be given in two-drop doses of the tincture for each year. Children stand alcohol, mercury, strychnine and arsenic well, caffeine and cocaine poorly. Chloral is a good

hypnotic; sulphonal and trional are also safe sleep producers. Strophanthus is preferable to digitalis, and sodium salts to those of potassium. Medicines which are eliminated rapidly, such as alcohol, nitroglycerin, ammonium salts, aconite and belladonna, should be repeated at frequent intervals.

Chronic Appendicitis and Movable Right Kidney. The chief symptom and most important complication of movable right kidney is chronic appendicitis, asserts Prof. Geo. M. Edebohls in the February *Post Graduate*. His statistics show that 20 per cent. of all women have movable kidney or kidneys; that 4 per cent. of all women have symptom—producing movable kidney or kidneys; that while $3\frac{1}{2}$ per cent. of all women have both symptom producing movable kidney and appendicitis, only $\frac{1}{2}$ per cent. of all women have appendicitis and well anchored kidneys. Chronic appendicitis, he says, may be the only symptom of movable right kidney, and the existent relations are those of cause and effect, probably through indirect pressure upon the superior mesenteric vein, hampering the return circulation of the appendix. There is no tendency to spontaneous cure, and the majority of patients require both nephropexy and appendectomy to meet all the indications and restore to perfect health. Both operations may be simultaneously performed through a single lumbar incision, extending along the outer margin of the erector spinae muscle from the twelfth rib to the crest of the ilium.

The Treatment of Puerperal Insanity. An impending attack may often be cut short, says Charles F. MacDonald (*Medical Record*, Feb. 18) by free and timely use of hypnotics to combat the early insomnia. Of this class of remedies, sulfonal, trional and chloral hydrate are to be preferred, given in doses of 25 to 30 grains. For the melancholia the deodorized tincture of opium, 15 or 20 minims thrice

daily, is an invaluable remedy. *Cannabis indica* with potassium bromide, is both useful and harmless as a sedative. The fluid extract of ergot, a drachm three times a day, is recommended in cases with subinvolution. All depressing and depletant measures are to be avoided. The food should be nutritious and concentrated, and, if refused, forced alimentation must be employed, using the nasal or stomach tube. The best form of nourishment is a combination of raw eggs and milk, enriched with cream, of which mixture a tumblerful should be given four or five times daily. All the bodily functions should be carefully regulated. The attending nurse must be at once quiet and gentle, yet firm.

Cardiac Murmurs and the Apex-Beat. The editor of the *Medical News* calls attention to the often neglected fact that the murmurs of true valvular heart lesions are almost always accompanied by displacement of the apex-beat. He says further: "Systolic murmurs at the apex, without displacement of the apex-beat or accentuation of the second pulmonary sound, are phenomena that may be regarded with entire indifference. These may form a large part of the cases in which the murmurs disappear after treatment, and they are published as cases of cured valvular heart lesions."

Urinary Tuberculosis. An exhaustive clinical study upon the value of rectal examination in the diagnosis and treatment of surgical urinary disease has been made by E. Hurry Fenwick, and his first lecture of the series, "Clinical Notes Upon the Rectal Contour and Consistence of a Thousand Prostate Glands," appears in the *British Medical Journal* of Feb. 18. Urinary tuberculosis is considered first. This obscure and insidious affection can be diagnosed at an early stage, he affirms, by palpation of the prostate, testicles and seminal vesicles, one or

all of which are pretty certain to present sooner or later a rounded, firm and painless, isolated knot or lump of tuberculous deposit, which may change position in time or undergo a marked decrease in size. In acute inflammatory cases, however, the deposit is large, irregular and tender. Following the absorption of deposits, the prostatic lobes become flattened and leathery, with confused outlines and trough-like sulcus; many of them feel like a sheet of thick parchment. The most common route taken by urinary tubercle is from the epididymis to the corresponding lobe of the prostate, ureteral orifice and kidney, or from the kidney down the same side. Rarely a short-cut, a by-path or a cross route is traversed.

Urinary tuberculosis, says the author, may simulate every other urinary disease, particularly renal and vesical stone. Instrumentation should be sedulously avoided in urinary diseases until after one has examined the testicles, the prostate and bladder base per rectum. Obscure renal pain or even renal colic is sometimes explained by the presence of a tuberculous knot in the prostate. But aching kidneys are also excited by backward pressure if the patient has had to strain repeatedly, or by a mild ascending pyelitis or patchy nephritis of ascending microbic infection due to intra-vesical procedures. The diagnosis of tubercular disease should, of course, be controlled by a bacteriologic examination. As regards treatment, sounding and washing out the bladder, almost invariably make matters eventually worse and hasten a fatal end.

Suprarenal Extract Dr. J. H. Thompson (*Medical in Eye Troubles. Monograph*, February) writes of the value of suprarenals in relieving congestion antecedent to cocainization. Five grains of the desiccated sheep capsule should be macerated in two drams of water for a few minutes and then filtered. Two or three drops of the clear solution instilled into the sac will blanch the conjunctiva almost

immediately. The solution will not keep, and heat and preservatives appear to destroy its physiologic potency.

Digitoxin. After briefly reviewing the literature of the subject, the editor of the *University Medical Magazine* concludes that digitoxin, if not a perfect substitute for digitalis, is a remedy of great value, tolerably free from the untoward effects of the crude drug and convenient of administration. It may be given by the mouth, by the rectum, or hypodermically. The dose per os is 1-250 to 1-125 grain thrice daily; per rectum, 1-100 to 1-80 grain. The writer quotes Balfour as recommending in senile heart the daily administration at bedtime of one-quarter of a milligramme of Nativelle's digitaline, which, according to Brunton, is chiefly, if not entirely, digitoxin.

Treatment of Hemoptysis. Bleeding from the lungs and bronchi is of course merely a symptom and its proper treatment varies greatly with the causative disease. In tubercular cases, says Hare, (*Therapeutic Gazette*, March) a hypodermic injection of a quarter grain of morphine is the best routine method of treatment when the hemorrhage is free. If profuse bleeding produces collapse, small, frequent doses of aconite may be given to lower arterial tension; chloral also is of service in quieting the circulation, allaying cough and inducing sleep. A small ice-bag over the part affected may do good reflexly if it is a bronchial vessel supplied with nerves and muscular fibers.

When hemoptysis occurs in a person of advanced years, with atheroma and high arterial tension, nitroglycerin is the obvious remedy. If it is slight and due to the pulmonary engorgement of a weak right heart, digitalis and similar remedies are of advantage. If the heart is hypertrophied, small doses of aconite are necessary. Concerning the much-used ergot, the writer

concludes that it is of service only in oozing from capillary areas, and that by increasing blood-pressure it increases the flow of blood from an eroded artery. Calcium chloride is of value in rendering the blood more coagulable, and normal saline injections are almost indispensable in grave cases.

Antitoxin. Diphtheria mortality in Denver during ten years. Before Antitoxin was discovered:

Year	Cases	Deaths	Per Cent. Mortality
1889	233	109	46.5
1890	720	277	38.6
1891	468	175	37.4
1892	300	89	29.7
1893	318	106	33.3
1894	233	71	28.7
Total	2,272	827	36.4

Since Antitoxin was introduced:

Year	Cases	Deaths	Per Cent. Mortality
1895	248	40	16.1
1896	246	19	7.7
1897	297	43	14.5
1898	386	34	8.81
Total	1,177	136	11.57

Year	—Treated with Antitoxin—			—Treated without Antitoxin—		
	Cases	Deaths	Mort.	Cases	Deaths	Mort.
1895	123	9	7.3	125	31	25.1
1896	107	7	6.5	139	12	8.7
1897	147	6	4.1	150	37	24.6
1898	250	8	3.5	158	26	16.66
Total	607	30	4.95	570	106	18.60

Puerperal Hemorrhage. The ordinary form of post-partum hemorrhage is nearly always preventable or controllable by causing perfect retraction of the womb by manual rubbing, hot intrauterine douches or the gauze tamponade. But unusual forms are sometimes met with, which require very different methods of treatment. A number of such interesting and instructive cases are reported by S. Marx in the *Medical News* of March 4. In the first case related, the woman, when five months pregnant, was delivered in a natural manner of a fetus in an intact

fruit-sac. A week later labor pains again began, ending with the expulsion of a second fetus and macerated placenta. Five weeks after the second birth, with sudden and profuse hemorrhage, a third intact fetal sac was expelled, filled with liquor amnii, but without any trace of a fetus. The second case was one of placental dystocia, due to an overdistended bladder, and the writer deems it always essential to prove the bladder empty by the catheter, since frequent urination or incontinence is so often the result of retention. The fourth case was a nearly fatal one of secondary hemorrhage on the tenth day of puerperium, due entirely to uterine relaxation from displacement by an overfilled bladder of thirty-six hours' retention. In painful retention of urine in the recently confined woman, the uterus is always dislocated to one side and is sometimes retro-displaced. The next case was one on the seventh day after labor, of very severe bleeding from straining at stool, with partial inversion of the womb, caused in part by an organized fibrous placental polyp. In this connection, while the writer does not hold with those who insist upon entering every puerperal uterus when there is a suspicion that a small piece of placenta or membrane remains behind, yet he demands an exploration when there are persistent after-pains, particularly in primiparae who have not been given ergot, as well as in the more obvious instances with subinvolution, bloody or fetid lochia, fever and rapid pulse. The following case was a scorbutic vulvovaginal hematoma, so enormous that after incision and turning out of clots, forty-two yards of two-inch gauze were required to pack the cavity. The next case, which was fatal, was a general vulvovaginal hemorrhage, perhaps due to hemophilia, and occurring after careful manual dilation of the cervix for partial placenta previa. The last case reported was one of fatal secondary hemorrhage, from a deeply lacerated cervix. Although used by mistake in this instance, the writer finds the uterovaginal tamponade both futile and harmful in cervical hemorrhages and asserts that here alone are the suture and needle indicated.

Black Urine. A change of color, on standing, to dark brown or even black is noted in true melanuria and in the so-called phenol urines, after taking large doses of salol or carbolic or salicylic acid. Chittenden (*New York Medical Journal*, Dec. 31, 1898) differentiates these forms by the reaction with ferric chloride, which gives a gray precipitate of phosphates with melanogen and a violet coloration with the coal tar remedies.

A Very Early Sign of Pulmonary Phthisis. According to the *Medical News*, Prof. Lampadariou, of the University of Athens, has discovered that a tubercular rale may be heard in the upper part of the lung when the patient is lying down for some time before the sign is apparent on standing, and even in some cases before the appearance of the tubercle bacilli in the sputum. The lesson taught, therefore, is to examine our patients in the recumbent position for incipient phthisis, as well as for pleurisy and heart disease.

Formalin in the Treatment of Whooping-Cough. Working on the basis that pertussis is a purely local infection, with incidental systemic effects, Dr. Howard S. Olliphant, (*New York Medical Journal*, March 4) has for the past year been using local applications of formalin to the throat and fauces. Of twenty children thus treated, all were cured in less than eight days, and several after only three applications. Free emesis is to be expected after each treatment. For young and weakly children the solution should be well diluted.

Vaccination Accidents. Tuckerman (*Cleveland Medical Gazette*, February) says that physicians are to some degree responsible for the bad repute in which vaccination is held by many persons. "If these cases are properly cared for from the first and

are watched to avoid complications, bad arms will cause trouble but rarely." In addition to ordinary surgical cleanliness, and inspection every few days, the writer recommends the routine administration of a rhubarb-soda-ipecac mixture. If the glands show signs of involvement, a half grain of calcium sulphide may be given every two to four hours. For erysipelatous inflammation, a 10 to 15 per cent. solution of ichthyol is recommended. A sloughing cavity should be filled with balsam of peru (a dram to the ounce of castor-oil) and covered with a gauze pad, retained in place by adhesive strips.

Influenza Bacillus. F. Eldredge Wynekoop, of the Chicago Board of Health, has made somewhat of a bacteriologic study of the late epidemic of grip in that city, and reports his findings in the *P. and S. Plexus* for February. The influenza bacilli are minute (5x2 micromillimeters), usually solitary in primary cover-glass specimens, non-motile, and stain poorly, chiefly at the ends, carbol-fuchsin being the best stain. They grow well only at a temperature from 26° C. to 35° C., and are best cultivated on blood serum which contains a little hemoglobin. Upon this medium, after a few hours' incubation, there appear colorless, transparent colonies, like the water-drops of condensed moisture. The micro-organisms are present in the bronchial secretions and may also be obtained from the mucous membrane of the tonsils and pharynx.

Forced Examination of the Larynx in Children. Laryngoscopy in children is exceedingly difficult and unsatisfactory, as is known to all.

A simple and practical method of examination in young children is described as follows by Dr. Blackader in the initial, March, number of Lea Brothers & Co.'s new quarterly digest, "Progressive Medicine" "The infant is placed in the usual position for laryngoscopy, the

index finger of the left hand is passed well into the mouth, and the terminal phalanx locked around the hyoid bone which is pulled forward. The rest of the finger acts as a tongue depressor, the knuckle as a gag, while the left thumb under the chin serves to steady the head. With the use of a small mirror, the larynx can now be easily seen. The method causes no pain and requires no anesthetic, while the younger the infant the less is the resistance and the easier the examination."

Northwestern University Dr. Ridlon informs us that
Woman's Medical School. Dr. Marie J. Mergler has been elected dean in place of Dr. I. N. Danforth, who has resigned and been elected dean emeritus. The yearly course has been changed from one of two semesters to one of four semesters of twelve weeks each, commencing the first of July, October, January and April. Three semesters are required; the other, optional. Regular students will be limited to 125 in each class, and will be admitted on competitive examination only, after having complied with the requirements of the state board of health.

A Simple but Successful A particularly efficient
Treatment of Leg Ulcer. method, according to the writer, is described by Dr. J. Howe Adams in the *Medical Age* of March 10. After cleansing the sore with 1-1,000 bichloride solution and douching with a spray of peroxide, the ulcer is covered with half-inch overlapping strips of Lister's green protective. applied from below upward. Over this dressing is placed a thick layer of moist bichloride gauze, and a tight-fitting, figure-of-eight bandage is applied to the leg and foot. The dressing should be renewed every other day until the sore disappears, usually in four to six weeks, after which a Randolph rubber bandage should be worn by the patient for some time. The treatment does not interfere with the patient's occupation, which is a great desideratum in most instances.

Treatment of**Acute Meningitis.**

As this disease is now in Denver, the following condensation by Thomas C. Minor, from Debove and Gouvin's recent work on French Therapeutics (*Cincinnati Lancet-Clinic*, March 11) may be of service to our readers: Blood Letting—Leeches to mastoid apophyses, wet cups to neck. Refrigerants—Ice cold compresses on head. Revulsives—Sinapisms to limbs; croton oil to head; tincture of iodine and blisters on shaved head. Frictions on the head and internal surfaces of thighs, use belladonna ointment. Purgatives—Injections of senna and sulphate of sodium; calomel in large doses; drastics, such as scammony and aloes. For Pain—Antipyrin, chloral, opiates. For Delirium and Convulsions—Bromides, alkalines, chloral. For Fever—Antipyrin, antifebrin, sulphate or bromhydrate of quinine, cold affusions, tepid and cold baths.

Umbilical Hernia.

This frequent defect of infancy is treated in the Children's Department of the Vanderbilt Clinic (Francis Huber, *Pediatrics*, March 1) by means of a flat pad made of cork, thin board or a large button or coin, larger than the aperture, covered with sheet lint, gauze or absorbent cotton and kept in place by strips of adhesive plaster or Dieterich's plaster, which contains zinc and is non-irritating. Additional support is afforded by the ordinary binder or broad belly band. These cases ought to be seen at regular intervals.

Annual Announcement of American Medical Association.

The Fiftieth Annual Session will be held in Columbus, Ohio, on Tuesday, Wednesday, Thursday and Friday, June 6, 7, 8 and 9, commencing on Tuesday, at 11 a.m.

The delegates shall receive their appointment from permanently organized State Medical Societies, and such County and District Medical Societies *as are recognized by representation in their respective State Societies*, and from the Medical Departments of the Army, Navy, and Marine Hospital Service of the United States.

Each State, County and District Medical Society entitled to representation shall have the privilege of sending to the Association one delegate for every ten of its regular resident members, and one for every additional fraction of more than half that number: *Provided*, however, that the number of delegates for any particular State, Territory, County, City or Town shall not exceed the ratio of one in ten of the resident physicians who may have signed the Code of Ethics of the Association.

Members by Application.—Members by Application shall consist of such members of the State, County and District Medical Societies entitled to representation in this Association, as shall make application in writing to the Treasurer, and accompany said application with a certificate of good standing, signed by the President and Secretary of the Society of which they are members, and the amount of the annual membership fee, \$5.00. They shall have their names upon the roll, and have all the rights and privileges accorded to *permanent members*, and shall retain their membership upon the same terms.

Each delegate or permanent member, when he registers, is requested to record the name of the Section, if any, that he will attend, and in which he will cast his vote for Section Officers.

Secretaries of Medical Societies, as above designated, are earnestly requested to forward, *at once*, lists of their delegates.

Also, that the Permanent Secretary may be enabled to erase from the roll the names of those who have forfeited their membership, the Secretaries are, *by special resolution*, requested to send to him, annually, a corrected list of the membership of their respective Societies.

WM. B. ATKINSON,
Permanent Secretary.

EDITORIAL ITEMS.

The Tongue in Therapy.—A white coated tongue is said to be an indication always for alkaline salts; a red tongue for acid substances.

Urinary Antisepsis.—Urotropin, 5 to 10 grains three or four times a day, is recommended as an efficient antiseptic in bacteriuria.

Function of the Thymus Gland.—It has now been proved to a seeming certainty that this organ is the original source of all the leucocytes in the body.

Hysterical Convulsions.—Nothing cuts these short with greater surety, safety and rapidity than a hypodermic injection of one-tenth grain apomorphine hydrochlorate.

Leukoplakia.—Shoemaker considers a 5 per cent. solution of papain in equal parts glycerine and water as probably the best local application for these white patches on the tongue.

Cerebrospinal Meningitis.—This disease has appeared as an epidemic in various portions of the country. In St. Louis, says the *Medical Review*, there were 61 deaths from this cause reported from February 1 to March 4.

Intestinal Tuberculosis.—Murphy affirms (*Chicago Clinic*, February) that the combination of the symptoms of recurrent obstruction, accompanied by fever and associated with hemorrhage, is pathognomonic of tuberculosis of the intestine.

Vegetable Pigments in the Urine.—These, says Memminger, often impart a garnet color to the urine, and may be distinguished by treating with a little nitric acid, which decolorizes the fluid, the color being restored on rendering alkaline again.

Midnight Insomnia.—For sleeplessness coming on some hours after going to bed, Church and Petersen recommend trional in 30-grain doses at bedtime, continued for a few nights until the course of the symptom has been discovered and removed.

Idiopathic Alopecia Premature.—Dr. J. M. Blaine (*Journal American Medical Association*) advances the plausible theory that this condition is due to the use of the razor. He bases his conclusions upon the close relation of the blood supply to the face and to the scalp (shaving promoting the growth of the beard and thus acting as a derivative to the scalp) and upon the absence of this form of baldness in women and in hairless races.

Diagnostic Value of Peptonuria.—Hobart Egbert calls attention (*Dietetic and Hygienic Gazette*) to the important fact that albumosuria is present in all septic conditions with pus formation, while it is absent in the sepsis occulta of multiple sarcomatous nodules.

Subjective Cacosmia.—Dr. Zarniko (quoted in the February *Medical Bulletin*) states that the most frequent of subjective disagreeable odors is latent empyema of the maxillary sinus, which he has often been able to diagnose from this symptom alone.

Chewing Gum in the Appendix Vermiformis.—Dr. Kenyon lately reported at the San Francisco Clinical Society (*Pacific Medical Journal*, February) a case of operation for appendicitis, at which he had found a large piece of solid chewing gum in the appendix.

Alcoholic Pneumonia.—Dr. Thonas J. Mays asserts that tincture of capsicum, one-half to a dram every two or three hours, is of great value in relieving nervous depression, delirium, dry tongue, picking at bed clothes and the other symptoms of this serious disorder.

Post-Partum Thrombosis.—Singer (quoted in *New York Medical Journal*) states that the formation of thromboses is commonly indicated several days in advance of other symptoms by progressive augmentation of the pulse rate relative to a stationary temperature.

High Temperature in Pneumonia.—Dr. Magnus A. Tate lately reported before the Academy of Medicine of Cincinnati (*Lancet-Clinic*, March 11) a case of double pneumonia, which on the thirteenth day, shortly before death, showed a temperature of 108.8 degrees.

Suprarenal Extract in Nasal Operations.—Dr. Robert Levy has found concentrated suprarenal extract, when applied locally, just preceding intranasal operations, to be of considerable service in preventing for the time the hemorrhage which otherwise commonly obscures the field.

Dry Eczema.—The *Therapist* states that the following application has been found valuable in the treatment of such forms when affecting the hands: One ounce sulphurous acid and one dram glycerin, with water to make two ounces. This lotion should be applied night and morning.

A Cancerous Family.—Dr. Hugh M. Smith, of Washington, D. C., reports in the *Medical Record* of Feb. 15, the cases of a mother and her three daughters, all of whom developed cancer when over seventy years of age. In three instances the breast was affected; in the fourth, the stomach.

Therapy of Superheated Air.—H. Augustus Wilson, in two years experience, has found the hot oven most beneficial in hydrarthrosis, using a temperature of about 300 degrees for two hours. The treatment seemed also to be useful in fibrous ankylosis, but did little if any good in gout and rheumatism.

Prolapsus Ani in Children.—The *Georgia Journal of Medicine and Surgery* remarks that when the case is seen early, it may be relieved and usually cured if after each evacuation of the bowels the mother reduces the prolapsed gut as instructed and then injects into the rectum ten to thirty drops of fluid extract of witch hazel, dissolved in two to six ounces of cold water.

The Medical Monograph.—This is a unique monthly publication, edited by Dr. Wm. E. McVey, former editor of the *Kansas Medical Journal*. It is published in Topeka. Each number deals only with a special topic or class of diseases. The first number is on diseases of the liver, and is a fairly thorough and practical presentation of the subject from several points of view.

Half-and-Half.—Our attention has been called by the *Indiana Medical Journal* to the fact that the newly elected editor of the *Journal of the American Medical Association* has been a homeopath longer than a regular physician. On referring to Polk we find that Dr. Simmons graduated from Hahnemann Medical College in 1882 and from Rush Medical College in 1892.

Neuralgic Pains of Tuberculous Patients.—Capitan (quoted in *Louisville Medical Monthly*) recommends the following ointment: Guaiacol, 75 grains; menthyl salicylate, 75 grains; extract of belladonna, 3 grains; extract of opium, $3\frac{3}{4}$ grains; vaselin, 4 drams; lanolin, 4 drams. A small quantity should be applied without rubbing, and the part be wrapped in cotton. If redness supervenes, the ointment is to be discontinued.

BOOKS.

Diseases of the Eye.—A Hand-Book of Ophthalmic Practice for Students and Practitioners. By G. E. de Schweinitz, A.M., M.D., Professor of Ophthalmology in the Jefferson Medical College; Professor of Diseases of the Eye in the Philadelphia Polyclinic; Ophthalmic Surgeon to the Philadelphia Hospital; Ophthalmologist to the Orthopedic Hospital and Infirmary for Nervous Diseases. With 255 Illustrations and Two Chromo-Lithographic Plates. Third Edition, Thoroughly Revised. Royal Octavo; 696 pages. Price in Cloth, \$4.00 net; Sheep or Half Morocco, \$5.00 net. Philadelphia: W. B. Saunders, 925 Walnut Street. 1899.

The work before us is one of the foremost text-books of the present decade. It is full, clear and systematic, and is therefore particularly adapted to the needs of students. The third edition has been carefully revised and contains much new matter, especially on specific infections relating to the eye. A number of new illustrations have also been added. The author is to be congratulated upon his thorough and attractive presentation of a very difficult and interesting subject.

An American Text-Book of Diseases of the Eye, Ear, Nose and Throat.—Edited by G. E. de Schweinitz, A.M., M.D., Professor of Ophthalmology in the Jefferson Medical College, Philadelphia; Consulting Ophthalmologist to the Philadelphia Polyclinic; Ophthalmic Surgeon to the Philadelphia Hospital and to the Orthopedic Hospital and Infirmary for Nervous Diseases; and B. Alex. Randall, M.A., M.D., Ph.D., Clinical Professor of Diseases of the Ear in the University of Pennsylvania; Professor of Diseases of the Ear in the Philadelphia Polyclinic; Ophthalmic and Aural Surgeon to the Methodist and Children's Hospital, Philadelphia. Royal Octavo; 1251 pages. Illustrated with 766 Engravings, 59 of them in Colors. Price in Cloth, \$7.00 net; Sheep or Half Morocco, \$8.00 net. Philadelphia: W. B. Saunders, 925 Walnut Street. 1899.

This volume is one of the best and most complete of Mr. Saunders' admirable Text-Book Series. Sixty of the leading American ophthalmologists, otologists and rhinologists have contributed to the production of this mosaic work. The embryology, anatomy and histology of the eye are presented very clearly and fully by George A. Piersol. The general physiology of vision is discussed briefly by Albert C. Brubaker. The all important general optical

principles of katoptrics, dioptrics and physiologic optics are scientifically elucidated by Wm. S. Dennett and Colman Ward Cutler. The two editors offer many helpful hints on the external examination of the eye and on ophthalmoscopy. Practical methods of determining the refraction of the eye is a subject which receives masterly attention from the pen of Edward Jackson, who also gives a lucid account of the various forms of abnormal refraction. Spectacles and their adjustment is a practical theme considered by R. J. Phillips. Diseases of the eyelids are described by B. L. Milliken, diseases of the lachrymal apparatus by Samuel Theobald, diseases of the conjunctiva by John E. Weeks, diseases of the cornea and sclera by Swan M. Burnett, diseases of the uveal tract by Robert L. Randolph, diseases of the crystalline lens by Wm. E. Hopkins, diseases of the vitreous by Fleming Carrow, diseases of the retina by Lucien Howe, diseases of the optic nerve by Harold Gifford. Amblyopia and amaurosis are considered at some length by Casey A. Wood and H. V. Wurdemann. The symptoms and treatment of the different varieties of glaucoma are outlined by J. A. Lippincott. Intraocular growths are differentiated by Ward A. Holden. The movements of the eyeballs and their anomalies are adequately treated by Alexander Duane. Alvin A. Hubbell describes injuries of the eye and its appendages; F. Buller, injuries and diseases of the orbit. The sections on operations are by de Schweinitz, Hotz, Kollock, Knapp, Ayres, Theobald and Buller, and are amply illustrated. The appendix to Part I. includes "Methods of Color-Blindness," by J. Ellis Jennings; "Standards of Form and Color-Vision Required in Railway Service," by A. G. Thompson; "The Roentgen Rays in Ophthalmic Surgery," by William M. Sweet; "The Practice of Ophthalmic Operations on Animal Eyes," by Clarence A. Veasey; and "The Most Important Micro-Organisms Having Etiological Relationships to Ocular Diseases," by G. E. de Schweinitz. Part II., on the ear, comprises 190 pages of text, in thirteen sections, by recognized authorities. It contains a colored-plate exhibiting the appearance of the drum membrane in twenty-four pathologic conditions. The third part of the book treats of the nose and throat (including the larynx) and embraces 406 pages, arranged in twenty sections, written by Harrison Allen, Walter J. Freeman, Arthur A. Bliss, J. H. Bryan, John W. Farlow, Geo. A. Leland, Wm. E. Casselberry, Morris J. Asch, James Edward Newcomb, W. Perre Porcher, Robt. Cunningham Myles, Wm. E. Hopkins, C. E. de Sajous, J. H. McCollom, E. L. Shurly, Wm. C. Glasgow, Jonathan Wright, John O. Roe, and G. Hudson Makuen. Aside from its value as a comprehensive text-book for students, this volume should be of great service to practitioners as a reference work. An excellent index insures ready access to any part of the text.

The Dawn of Reason, or Mental Traits in the Lower Animals.—By James Weir, M.D., Jr., Author of "The Psychical Correlation of Religious Emotion and Sexual Desire," etc. Price, \$1.25. The Macmillan Company, 66 Fifth Avenue, New York.

We have perused this little volume with much interest and pleasure. The author has been for many years a keen observer of beasts, birds, insects, reptiles and fishes, so that a great part of his data is original with himself. While the text consists largely of anecdotal illustrations, it is sufficiently scientific for the general reader, including physicians. Dr. Weir claims that certain of the lower animals possess two auxiliary senses, namely that of tinctumutation or "color-changing" and that of direction or the "homing instinct." He has discovered the nervous centers for these senses, and appears to have proved without doubt, by suitable physiologic experiments, the dependence of these functions upon their centers. We recommend the book to all our readers.

A Hand-Book of Obstetric Nursing for Nurses, Students and Mothers.—Comprising the Course of Instruction in Obstetric Nursing Given to the Pupils of the Training School for Nurses Connected with the Woman's Hospital of Philadelphia. By Anna M. Fullerton, M.D., Obstetrician, Gynecologist and Surgeon to the Woman's Hospital of Philadelphia, and Formerly Physician-in-Charge and Superintendent of its Nurse School; Clinical Professor of Gynecology in the Woman's Medical College of Pennsylvania. Fifth Revised Edition. Illustrated. Price, \$1.00. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. 1899.

Dr. Fullerton's brochure is a gem in its way. It contains all that any nurse needs to know and no more. It aims to teach the nurse her proper duties and emphasizes the importance of cleanliness, antisepsis and eternal vigilance on her part as assistant to the physician. A third of the text is taken up with matters pertaining to early infancy. The present edition is entirely up to date.

An Experimental Research Into Surgical Shock.—An Essay awarded the Cartwright Prize for 1897. By George W. Crile, A.M., MD., Ph.D., Professor of the Principles of Surgery and Applied Anatomy in the Cleveland College of Physicians and Surgeons. Price, \$2.50. Philadelphia: J. B. Lippincott Company.

This is a thoroughly scientific exposition of the subject, embracing 138 protocols of traumatic experiments upon dogs. An extensive summary of the evidence presented explains and compares the varying results in the various tissues, organs and regions. The same phenomena are shown graphically in a number of composite blood pressure charts. The author emphasizes the distinctions

between collapse and shock, and concludes that surgical shock is mainly due to impairment or break-down of the vasomotor mechanism.

Diagnosis by the Urine, or the Practical Examination of Urine with Special Reference to Diagnosis.—By Allard Memminger, M.D., Professor of Chemistry, Urinology and Hygiene in the Medical College of the State of South Carolina. Second Edition, Enlarged and Revised. With Illustrations. Price, \$1.00. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. 1899.

This little book is an exceedingly simple presentation of the fundamental principles of the subject. The author's observations are all practical, and some of them are quite original. He does not lay so much stress upon the presence of casts as upon the relation of total solids to the quantity of urine. His modification of the heat test for albumin is to be commended. The book will prove of most service to physicians who have never had the advantages of a thorough laboratory course in uranalysis.

Proceedings of the American Medico-Psychological Association.—At the Fifty-Fourth Annual Meeting, held in St. Louis, May 10-13, 1898.

We are indebted to the secretary of the society, Dr. C. B. Burr, for this valuable collection of papers. Henry M. Hurd is the president this year. The annual address at the last meeting was delivered by J. T. Eskridge.



SELECTIONS.

Pillsbury's Vitos.—In this issue will be found descriptive ad. of this Ideal Wheat Food, which is being so widely advertised and placed on sale in every market throughout the world. It is rapidly becoming The World's Breakfast Food, as its sale in all European countries is even greater than in America, as foreigners eat more cereals and less meat than our own people, and are therefore more healthy and stronger. Pillsbury's Vitos is the practical result of more than twenty years of careful study and analysis by a corps of competent chemists employed by the great Pillsbury Mills in their own laboratory at Minneapolis, Minn.

Robinson's Lime Juice and Pepsin is an excellent remedy in the gastric derangements particularly prevalent at this season. It is superior as a digestive agent to many other similar goods. (See page 3, this issue).

J. J. Grant, M.D., Monticello, Fla., says: "I find nothing in the materia medica to equal Aletris Cordial in uterine diseases. I have used it in a very obstinate case, which outstood several important remedies. When I put the patient on Aletris Cordial every diseased symptom disappeared in a week's trial. I have used it in several cases, and can, therefore, say that it is an active and powerful agent for diseases of the womb."

"M. S., 52 years of age, male, was some years afflicted with an obstinate form of erythema, probably of specific origin, which heretofore had resisted the usual constitutional and local treatments. The itching of the eruption was intolerable, the anaemia very pronounced—the whole constitution run down. Six weeks medication with Iodia, supplemented by extract of malt and cod-liver oil, brought the case under control. I attribute the good effect of Iodia in this, as in other cases, not so much to its mineral ingredients (potass. iodide and ferri phosphate) as to their combination with the fresh principles of vegetable alteratives. I, for my part, believe that only the extracts of the green or fresh plants are reliable for therapeutic effects, the common fluid extracts of the dried plants having proven mostly inert in my hands."—A. Ziegler, M.D., Allegheney, Pa.

Better Still.—The influenza has been quite prevalent in a number of cities during the past month. In Richmond, there have been many cases, though no deaths distinctly attributed to it. It is

affecting mostly those who have had the disease almost annually during the past few years. Although the attacks of this year are relatively mild, they are severe enough to keep business men away from their places of business. Phenacetin, or better still, Antikamnia, with salol or quinia, and a little powdered digitalis added, has proved a satisfactory plan of treatment, presupposing, of course, that the bowels are kept open, the secretions of internal organs are attended to, and that the patient is kept in-doors, especially at night or in bad weather.—*The Virginia Medical Semi-Monthly*.

Pillsbury's Germos.—We take pleasure in calling the attention of the medical fraternity to this world-famed Dietetic Flour (made from the whole of the wheat), which has just been placed on this market by the manufacturers. It is thoroughly sterilized; absolutely pure; digests itself; possesses phosphates for the brain, and bone, flesh, blood and muscle ingredients, which cannot be found in like quantity in other flour in the world. The large percentage of proteids, and the very low percentage of starch to be found in Pillsbury's Germos, makes it the ideal flour for both brain and brawn workers. The use of Germos Flour will nourish the blood, stimulate the bowels, and prevent and cure digestive disorders. It is unquestionably the best hygienic whole wheat flour on the market, and as such physicians would do well to call the attention of their patrons and patients to this fact, and advise its use generally.

Mal-Nutrition.—"I am sure the Imperial Granum Food was an efficient agent in restoring the health of a baby boy recently under my care. He was suffering from mal-nutrition, with a most persistent diarrhoea. Many foods were tried and discarded, and I was beginning to lose heart, when I happened to think of the Imperial Granum. Its use proved it to be very easily assimilated, and I think it saved the baby's life."— M.D.

Acute Coryza.—In this unpleasant affection the action of Blennostasine is "magical." It arrests the sneezing and mucous discharge without producing serious after-effects. Its superiority over quinine lies in the fact that it is a vaso-motor constrictor. Blennostasine is superior to belladonna, atropine, etc.; as a blennostatic, is non-toxic, and can consequently be given in large doses, if necessary without fear of after-effects. It exerts a tonic effect on the vocal mechanism, and is especially valuable in colds of public speakers and singers.



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DR. F. HENROTIN, Secretary, 174-176 Chicago Avenue, Chicago, Ill.

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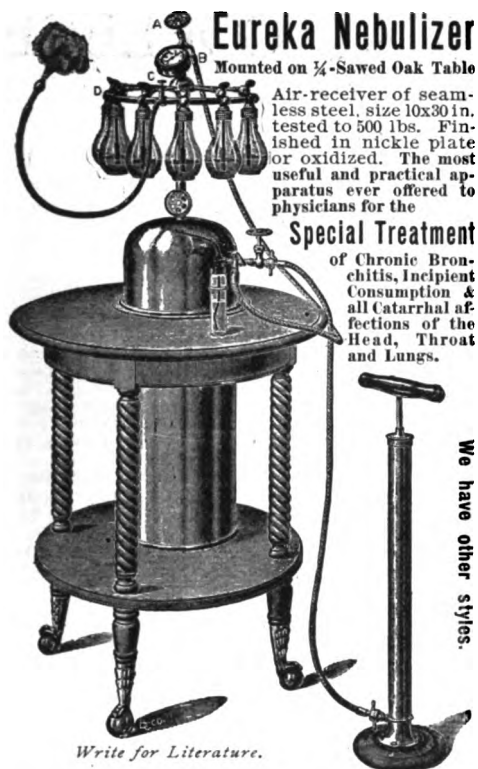
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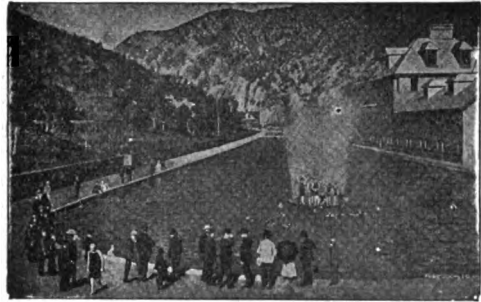
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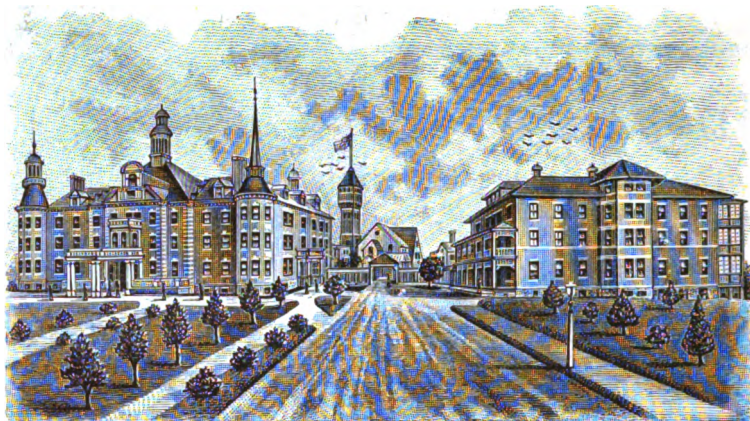
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JOS. M. MATHEWS, M.D.,
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DENVER MEDICAL TIMES

VOLUME XVIII.

MAY, 1890.

NUMBER 11.

ORIGINAL COMMUNICATIONS.

RECREATION FOR INVALIDS.

By E. A. LEE, M.D.,
Ft. Collins, Colorado.

Of all recreation for invalids and feeble persons, fishing of different kinds is perhaps more universally adapted to the capacity and needs of the greatest number than any other amusement, and also possesses the additional advantage of affording any degree of exercise or activity desired. Northern Colorado affords unusual facilities suited to these different requirements, and to acquaint the medical public with its many advantages is the object of this short article.

Many feeble persons, and ladies particularly, do not care to endure the hardships incident to trout fishing in the mountains, yet would greatly enjoy a little outing and boating, where fishing could give added enjoyment and interest to the occasion. For this class there may be found at Boulder, Longmont and Windsor, lakes well stocked with delicious sunfish, where at least a fairly good catch may be safely relied upon during any portion of the spring and summer months, while at Fort Collins and Greeley the same conditions exist, with the added attraction of having lakes well supplied with black bass, a fine, gamy fish, which, while possibly not up to the highest standard of Dr. Henshall, are very good, and afford substantial pleasure to a class of sportsmen more cultivated and appreciative in their tastes.

All these places are reached by the Colorado & Southern Railroad, and hotel accommodations very good for country towns, and at prices within the reach of all, can be found in each of these. Trout fishing, however, is the highest ideal of this kind of sport, and the man or woman who is able to suppress a good, broad grin after landing a fine, speckled fish may be suspected of having something radically wrong with his digestive organs. Successful trout fishing presupposes a certain amount of experi-

ence or technical knowledge, yet the efforts of the country urchin, with his willow pole, flax string, plain hook and grasshopper, are not always to be despised. For while he does not go fishing in approved style, with all the modern toggery, he often catches more fish than the man who does.

The best time for going to the mountains is after July 15th, when the rainy season is mainly over, and some of the best trout streams in the country are found in Northern Colorado and Southern Wyoming. Take the Colorado & Southern Railroad north from Denver, get off at Loveland, where private conveyances can be procured to reach the Big Thompson, ten miles west. In this stream trout are usually plentiful and easily taken, but not very large. Next in order comes the Cache la Poudre river at Fort Collins, where transportation can be procured to reach the Poudre canon, ten to fourteen miles west, where good-sized fish can be caught and occasionally some very large ones.

Those wishing to penetrate farther into the mountains may do so by taking stage at Fort Collins for Campton's Hotel in Cherokee Park, distant thirty-five miles and located on the North Poudre river. The scenery in this locality is very beautiful; the large, rustic hotel, surrounded by many cottages, affords very desirable facilities for any class of people who enjoy natural beauty combined with restful quiet at a cost of \$10 per week, fishing included.

Farther up in the mountains is Zimmerman's Hotel, an excellent brick building, well furnished, having many modern comforts, good fare, and well kept. This resort is located on the main Poudre, sixty miles up the river from Fort Collins. (Daily stage from Fort Collins.)

Physicians having patients or families needing but little active medical treatment can send such to these places with no small degree of assurance that they will be more than pleased, as well as much benefitted, as they are sufficiently elevated to be cool, also remote from lines of travel, and therefore fresh and clean, and not crowded or stuffy from age or use. The Big Laramie river, having its source on the eastern slopes of the Medicine Bow range, flows northward into Wyoming and is reached by stage from Laramie City on the Union Pacific, or by stage road from Fort Collins, distant seventy miles, which road is rich in beautiful, bold scenery, traversing in many places one of the densest forests of the state.

This stream, with its tributaries, supplies nearly one hundred miles of very fine fishing. Road ranches and summer hotels care fairly well for the trouting public, and those who are accustomed to "roughing it" will here find little to complain of and much

to delight them. One of these tributaries, known as the McIntyre, possesses very rare and beautiful scenery, fine woods and such a profusion and variety of flora as will well repay one for the time and cost of a journey to enjoy them. Through its deep and heavily shaded, mossy and fern-carpeted canon, the stream in its rapid course descends over huge boulders, lashing itself into white foam and so interspersed with numerous little falls as to lend a charm to the surroundings, which the writer in his thousands of miles of mountain travel has rarely seen equalled and never excelled.

North Park has several excellent and well stocked trout streams of good dimensions, all having their origin in the mountains that form the rim of that great basin, then converging and flowing to the north end of the park, by their confluence form the North Platte river. This stream at once enters a deep canon, and cutting through the mountain for a distance of twenty miles, again emerges on the Laramie plains. It is of such size as to be seldom fordable at any place during any season of the year. This river was stocked many years since by the citizens of Wyoming with rainbow trout, and it is here the sportsman reaches the tip-top notch or high-water mark of trout fishing—it is his veritable paradise. By leaving the Union Pacific railway at Laramie City or Fort Steele, all desirable points on this stream can be reached.

The fish here are very large, catches being made measuring twenty-four to thirty-six inches, and weighing from six to twelve pounds. The fisherman who meets one of these fellows for the first time will be in some doubt whether he has been suddenly hitched to a bucking bronco or struck by a cyclone.

SEEKING HEALTH IN COLORADO.

By LUTHER H. WOOD, Ph.B., M.D.,
Denver, Colorado.

Few facts are better attested than are the benefits to be derived from the Colorado climate by the consumptive.

It is equally certain that the chief factors of its sanitary influences are the fresh, pure air of the Rockies, the pure mountain waters, and the abundance of bright sunshine, enabling the invalid to spend most of his time out of doors in comfort and safety.

Denver is a healthy city; its water supply is remarkably free from contamination. This is proven by the low death rate of 11.35 per thousand, or, excluding cases of consumption contracted elsewhere, 9.63 per thousand.

Still stronger evidence of the purity of its water supply is furnished by the fact that during October, 1898, there were only nine deaths from typhoid fever in a population of 167,000. The healthiest city, however, is still a city, with its crowded houses and more or less filthy streets and alleys. The high winds and resulting foul dust must be frequent in a dry climate.

I can imagine few more pitiable objects than the poor consumptives, poor both in health and in purse, hundreds of miles from home and friends, seeking health where? Too often in a little eight by ten bedroom, into which scarcely a ray of sunshine enters, and in the densest part of a large city, often in a down-town rooming house, quite likely heated by steam radiators and with no suspicion of ventilation.

Now, I ask, is this common sense? Is this worth leaving home and its comforts to come among strangers?

Life in the open air, and in pure air, is vital to the consumptive, and is very useful even under unfavorable climatic conditions; but the average invalid seems to be gregarious. He seeks companionship and amusement, and seems to easily forget why he left home and friends, and he does this within sight of the "promised land."

The difference between the atmosphere of the streets of Denver and that to be found within a few miles of the city, among the foothills and mountains, is enough to frequently change the result from failure to success.

The air of the mountains, unpolluted by the needs of city life, surcharged with ozone, can impart new life to the invalid, and, while the food may be coarser and in less variety, the appetite and digestion will far more than equalize the benefit to the invalid.

Many, it is true, do seek the fashionable summer resorts, such as Manitou and Estes Park, where they congregate in the hotel parlors and on the porches, and each one narrates in detail his various symptoms and the latest result of his doctor's examination with careful count of the bacilli in his sputa.

The mountains and foothills of Colorado are full of beautiful nooks, in many of which good accommodations can be found; either to board, or what is far better, to pitch one's tent and live close to nature, where needed provisions can be readily obtained; places where the air is pure and the water excellent, often with abundance of good hunting and fishing, and where pleasant drives

over good roads are within easy access, where the invalid may woo back health with every expectation of success, unless his vital powers are too greatly impaired.

Consumptives should seek Colorado at as early a stage as a diagnosis can be made, before softening and septic infection has occurred, and they should not remain in the city, but choosing the proper altitude for each case, get out into the open air of the mountains, where very many who now find an early grave may recover health and strength and live many years of activity and usefulness.

OBSERVATIONS ON THE EFFECTS OF GREAT ALTITUDES.

By E. A. WHITMORE, M.D.,

Leadville, Colorado.

The result of our recent war with Spain has added new interest to affairs medicinal as well as political and commercial.

Destiny has forced us to become the exponents of liberty and a higher civilization to ther people, people of different race, habits and environments from our own. Our interest in the tropics and the islands of the Pacific has thus been much enhanced.

The American Medical Association will in the future be represented from the Arctic Circle to the tropics and will embrace the antipodes. The reporting of personal observations from such varied sources and from such remote regions cannot prove other than of great interest and value. The great centers of population are to be found at or near sea level.

No doubt the utility of the great waterways in facilitating communication and commerce, and the ease of obtaining food supplies, has had much to do with this; but that nature has peculiarly fitted man for this altitude must, I think, be admitted. Pneumatic pressure is a matter of no small importance. The effect of two, three or four atmospheres upon the human organism is well known. Collapse of cutaneous veins, with consequent peripheral anaemia and congestion of internal organs, and increased absorption of oxygen and excretion of CO₂ are among the resulting phenomena. Essentially opposite results obtain under great diminution of atmospheric pressure. Any great departure from sea level in either direction must then be inimical to health. Mankind, however, has the power of great adapta-

bility and the natural abode of man may be placed anywhere from sea level to an elevation of 5,000 or 6,000 feet. At this elevation, say that of Denver, Colorado, one mile above sea level, atmospheric pressure is reduced about two and three-quarter pounds per square inch, and as nature constantly tends towards compensation, an altitude of even 10,000 feet, with a reduction of five pounds, is well borne by the majority. We have often read of the hardy mountaineers, and the idea is prevalent that they are particularly stalwart and vigorous. It must be remembered, however, that our historic ideas in this respect have been obtained from Great Britain and the European continent, where populous districts are not found at very great elevation.

The Scottish Highlands are only from 500 to 700 feet in height and the culminating point of the whole country obtain an elevation of only 4,400 feet. Even the Alpine villages reach a maximum of but 6,000 feet. According to George Von Leibig d'Aubigny, Dr. Archibald Smith and other observers, the natives of high altitudes are of less average height than their kindred born in the lowlands, but are distinguished by greater lung capacity. The discovery of the precious metals in our Rocky Mountain region, and the easy access gained by pushing forward numerous railways, has given it a population of very considerable magnitude, living at elevations of from 8,000 to 12,000 feet, and with all the accessories of a modern civilization.

It is to some of the physiologic and pathologic peculiarities, pursuant to a residence in these high altitudes, that I wish to call your attention. Mountain climbing is to me a most enjoyable recreation. Upon approaching the higher elevations, even to 14,000 feet, I have always experienced sensations of exhilaration and buoyancy. It is true that upon nearing these greater elevations the respiration is increased, heart action becomes more rapid, and fatigue more readily supervenes, requiring more frequent rest; but with the rest, recuperation takes place so rapidly that one's spirits seem to rise with the altitude. This, however, gives way after a variable time to a feeling of greater or less depression and exhaustion. The same is true to less extent of altitudes ranging from 8,000 to 10,000 feet, the elevation common to most of our mining communities, while we escape to a great extent many of the evils common to lower altitudes, such as tuberculosis, malarial affections, summer complaints, etc. The difference in atmospheric pressure, the high winds, dust and electrical disturbances all exert an influence upon the human organism. There are certain modifications met with both in health and disease. Nature sometimes fails in efforts toward compensation through lack of proper material.

This is no place for a weakened heart. Ordinarily hypertrophy of the heart and increased chest measurement is the natural consequence of the greater work required of the heart and lungs. Increased frequency of cardiac action is the rule, and a pulse rate of 90 or more is not uncommon. The reverse sometimes occurs, and I have met with a pulse rate as low as 45, lasting for a period of forty-eight hours, the heart sounds and pulse remaining rhythmical and of full force. The heart is under constant strain. In pneumonia the necessity of sustaining the heart from the very first is usually recognized. The action of veratrum, aconite or any heart depressant is greatly feared, and if circumstances seem to favor their employment, their effect must be closely watched. With the marked effect of altitude upon the nervous system. It is but natural that woman, with her sensitive organization, should suffer most under its influence. Intense nervous depression and excitement, migraine and neuralgia are not uncommon. No doubt the electrical condition of the atmosphere is in part responsible for these disturbances. Professor Rove of the Colorado State University has kindly given us the result of some observations, showing that during fine weather the air is positively electrified, while during threatening and stormy weather it becomes markedly negative, so that to the effect of a very highly electrified atmosphere upon the nervous system is added that of rapid fluctuation. Over-stimulation of the nervous system and the increased tax upon the heart and lungs make sustained activity, either physical or mental, to the limit that may be attained at lower altitudes, an impossibility, and on this account more rest and sleep become necessary. Our mining camps have the reputation of consuming large quantities of intoxicating beverages. This is due rather to the more universal use of alcohol than to individual consumption.

A large proportion of unmarried men, and the lack of innocent amusements, induces many to seek the excitement and recreation of the saloon and gambling house, where a false sense of sociability and generosity redounds to the benefit of the liquor vender. My observation leads me to believe that neither alcohol nor tobacco can be used to the same extent at great altitudes as at sea level without more rapidly deleterious effects. At the Montezuma mine, near Taylor pass, at an elevation of some 13,500 feet, I met a man whom I had previously known as an excellent engineer, but who would go on frequent sprees. He informed me that working at the Montezuma was equivalent to taking the "jag cure;" that whisky was not only difficult to get, but that he could not drink it. There were some thirty or forty men employed there, and they used no coffee and but little tea. Very

much the same condition obtains at the Hill Top mine on Mosquito range, elevation about 13,000 feet. Biliousness, constipation and a nervous irritability is very prevalent, forcing them to go down lower, after having worked at these altitudes a few months. No doubt the food occasions some of these troubles, as it is difficult to obtain fresh fruits and vegetables, and nitrogenous food is used in excess. This excess of nitrogenous food, together with faulty secretion and elimination, tends also to the production of kidney troubles. Secretion and excretion are much interfered with at these altitudes.

Within a comparatively short time I have seen some six or seven cases of fecal impaction, with much pain and tenderness, some of them simulating an appendicitis, but all relieved upon the induction of free catharsis and the removal of from three to five quarts of feces. As physiological functions are modified, so also is disease and its manifestations. Malaria and tuberculosis as endemics are almost unknown; while we have had some genuine and severe cases of typhoid fever, with an occasional death, a typical case is rare. It is probable that what is known as mountain fever is a modified type of typhoid. On the other hand, pneumonia is particularly fatal; under the influence of the dry air and dust the mucous membranes suffer and catarrhal troubles result. In consideration of this subject it should be remembered that our mining camps are of recent date, and that we really have no native adult population at these altitudes. In the future there may be generations born and brought up at these altitudes, in whom physical development will be more in harmony with their environments. It is doubtful, however, owing to the wealth, the unrest, the desire for improvement and change, and the modern conveniences for travel, if we have a constant native population upon which might be based scientific investigation along this line, such as may be found among the mountain districts of South America and Asia.

In conclusion, let me add that whatever may be said of her greater altitudes as a permanent place of abode, Colorado at large, with her pine-clad mountains, her parks, valleys and plains, with altitudes varying from 3,000 to 15,000 feet, is an ideal spot for the pleasure or health seeker. Here in this dry and pure atmosphere the weary sportsman may wrap his blankets about him and lie down to pleasant dreams under the starry vault of heaven without fear that the protozoa of malaria may steal into his veins.

ENDOMETRITIS.*

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A careful study of endometritis, either from the standpoint of the pathologist or clinician, will demonstrate the inaccuracy and disregard of pathological conditions with which this subject is habitually considered. According to the accepted teaching of former times, and in the estimation of many writers and practitioners of the present, this would appear to be a very common affection, whereas as a matter of fact endometritis as a distinctive affection is a very rare condition. By many every case presenting a discharge from the uterus, not menstrual or malignant, is diagnosticated and treated as endometritis, in most instances to the detriment of the patient.

Much of the misapprehension pertaining to this subject has resulted from the classification of endometritis, as made in standard treatises and library papers. Nothing could be more misleading than the classification which divides endometritis into cervical and corporeal, a classification based on position and without regard to pathological character. The classification of mucous, hemorrhagic and purulent is likewise misleading, since these terms relate to symptoms which may be more properly regarded as phases of an inflammatory process rather than varieties of disease. The terms senile, malignant, fungous, hypertrophic, atrophic, congestive and polypoid relate to a variety of pathological conditions, which may be of degenerative, neoplastic and other characters not essentially inflammatory at all.

In order that this subject may be clearly understood it is appropriate that we briefly describe the endometrium. It consists of a stroma of fibro-connective and muscular tissues in which the glands are imbedded, covered by a single layer of columnar ciliated epithelium. It contains lymphatics and nerves, and the mucous glands are large and numerous. The endometrium is not supplied with separate blood vessels, but receives its nutrition from the superficial capillaries of the uterus. The ciliated columnar epithelium lines the entire uterus, also the uterine glands, and is continued through the Fallopian tubes. As the endometrium approaches the external os it loses its cilia and becomes blended with the pavement epithelium upon the vaginal portion of the cervix. The glands are tubular and narrow, dip

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down to the muscularis, and constitute a large portion of the volume of the endometrium. These glands are active and maintain a free secretion upon the surface of the membrane, with a plug of thick mucus in the cervical canal. Lymph spaces and vessels are abundant throughout the uterus, lying in the interglandular spaces, around the bundles of muscular fibers and in the serosa, converging into large channels which pass outward in the broad ligaments. The cervical endometrium has a peculiar arbor vitae arrangement, is more dense than the corporeal, and is attached to the muscularis by looser tissue; it does not participate in menstruation. The normal secretion of the endometrium is alkaline in reaction; the corporeal mucus is clear and watery, the cervical viscid. One important function of the cervix is to close as by a sphincter the uterine cavity; the great function of the corporeal endometrium is to form the decidua and nourish the embryo. A knowledge of this function of the cervix should of itself forbid the much-abused operation of forcible cervical dilatation in virgins. The gland-crypts of the cervix readily become a culture bed for germs, wherein they may long remain attenuated and under favorable conditions develop new cultures and activity.

The secretion of the uterine cavity is alkaline; that of the vagina acid. Under normal conditions the acid secretion of the vagina is a protection from pathogenic organisms and the endometrium is always sterile. Pathogenic cocci and other germs which might enter from adjacent cutaneous surfaces perish in the acid vaginal secretions, which are unsuited for their growth. The reaction of the vagina, however, may be altered by the presence of inflammatory products so that infection may occur through this route.

The endometrium is one of the most variable tissues of the body. It is subject to alterations that are physiological, so that it is most difficult to establish a normal appearance that is typical. This fact often leads to a mistaken diagnosis of endometritis. The endometrium is suffused with blood during menstruation, undergoes marked disintegration at that time and is afterward regenerated. During adolescence there is an increase in glandular tissue; during pregnancy this is even more marked, and atrophy supervenes after the menopause. The blood supply of the uterus is altered by physiological and pathological conditions extraneous to that organ, such as nervous states and wasting diseases. These observations are of the utmost importance in the practical diagnosis and treatment of uterine diseases, and will convince the painstaking observer that the common diagnosis of endometritis, followed by aggressive instru-

mentation and chemical antiseptics, is a grave error both in diagnosis and treatment.

For the proper consideration of this subject one must have a clear idea of infection and inflammation. Infection is the condition of invasion of tissues by micro-organisms, which, mechanically or by their products, irritate the tissues and disorder their functions. These organisms multiply rapidly, invade new areas, can poison the system and may be transmitted to other individuals.

The area of infection, occupied by the bacteria and their toxins, forms a center or focus to which leucocytes migrate, and by the process of sero-plastic infiltration form a limiting wall all around. This latter process is inflammation, being the reaction and resistance of living tissue under the irritation of bacteria and their toxins, and is conservative.

The genital tract is an open canal, extending from the vulva to the peritoneum, and is readily accessible to pathogenic bacteria. During menstruation the rupture of capillaries within the uterine mucosa is of itself a traumatism predisposing to infection. The traumatisms of parturition, of abortion, with retained disintegrating structures, blood clots and secretions, constitute the most perilous of all conditions furnishing ready and prolific soil for infection. Local treatment with instruments and destructive chemical agents, and surgical operations are potent factors in preparing the soil for recuperative and active culture of pathogenic germs. The various diatheses, such as lithemia, anemia and similar systemic diseases, impair resistance and facilitate infection.

The essential agents of infection are the pathogenic bacteria and their products. The organisms which most frequently invade the female genital tract are the suppurative bacteria (staphylococci and streptococci), the gonococcus, the bacillus coli communis and the bacillus tuberculosis.

The cervical canal of the uterus is peculiarly exposed to infection by the thinness of the epithelium, the network of its arbor vitae, and the richness of its lymphatic and vascular supply; and also by the fact that it is always torn in parturition. The Fallopian tubes anatomically are continuous with the uterus communicating directly with the ovaries and pelvic peritoneum. Nature has partially protected the endometrium both from below and above by the constriction at the internal os and the uterotubal constrictions.

When an infection has been established in any part of the female genital tract it may spread by continuity of mucous tissue or by means of the lymphatics and blood vessels. The trauma-

tisms of parturition evidently open the way for infection through vascular routes, since phlebitis and lymphangitis are often observed. Ordinarily when infection is established in the uterus the mucosa is first attacked. Endometritis is the initial area of activity and diffusion. In acute pelvic inflammations the endometrium is "the storm center" of infection. But endometritis does not long maintain its autonomy, for infection extends by continuity of surface to the Fallopian tubes; by invasion of the glands to the deep structures, the myometrium is involved; the lymph channels converge to the peritoneum and general metritis, salpingitis, ovaritis and peritonitis rapidly mark the extension of the area of invasion. Indeed, it is impossible either clinically or pathologically to establish a line of demarcation between endometritis and uterine and periuterine inflammation. Hence the impracticability of treating endometritis as a pathological entity; the endometrium is the focus of reception and distribution rather than the seat of disease. The term endometritis should be used clinically to indicate an essential part of uterine and peri-uterine infection, rather than a definite lesion, separate from contiguous structures.

While it is convenient to designate various infections of the endometrium by the terms puerperal, gonorrheal, traumatic, catarrhal, polypoid, etc., it is apparent that the only working classification is that of *acute* and *chronic*.

The limits of this paper and this occasion preclude the discussion of a theme of such magnitude as the treatment of pelvic inflammation. Yet I would submit some deductions as to prevention and treatment, which, though apparently simple, are constantly disregarded with disastrous results that are more frequently seen by the specialist than the general practitioner.

The importance in abortion, parturition and the puerperium of protecting the endometrium from infection by rigid asepsis is generally recognized. The readiness with which bacteria are conveyed to the receptive endometrium, by finger, instruments and dressings, is well known. The traumatisms of labor, the exposed vessels of the placental site and retained blood clots constitute a soil for propagation and diffusion equaled by no other field. Under these conditions the most trivial manipulation can inseminate a fatal infection.

The puerperal and traumatic infections may extend with terrible rapidity to a fatal result. The infected endometrium pours its septic products through the lymph channels so that myometritis, lymphangitis, cellulitis, peritonitis, salpingitis and ovaritis are quickly added to the invasive process. The diffusion of septic products may proceed with such intensity and rapidity

that no limiting wall of inflammatory products can be formed, and the entire system is poisoned. Suppurative foci may form in the myometrium in less grave forms of acute infection. In milder cases of acute infection the inflammatory process walls around the infected area. It is the peritonitis which saves life. Dilatation, curettage and gauze drainage of the endometrium should not be applied in the treatment of these cases of acute infection. This procedure is most perilous. The mouths of vessels are closed; the inflammatory exudate which limits the infected area is fresh and soft; the infection has already passed to the parametrium. To open up vessels and break through barriers is to spread infection. Gentle irrigation of the endometrium and removal of retained debris in the early stages of infection will do good; after that the endometrium should be left undisturbed. The same caution should be observed in the treatment of acute gonorrheal infection as in the infections of puerperal and traumatic origin.

In chronic pelvic inflammation, a certain class of cases will be cured by appropriate treatment of the endometrium. These are cases wherein the endometrium has been throughout the focal point of infection, and in which there remain evidences of persistent activity. The size of the uterus, the condition of the mucosa, and the character of the discharge will enable the surgeon to recognize the cases amenable to such treatment. When the infected endometrium has become soft, thickened and friable, with muco-purulent secretion, its thorough removal will be followed by prompt cure. Before resorting to this operation, however, the appendages should be carefully examined, and if additional foci of infection exist therein, curettage should not be done. In properly selected cases the results are prompt and most satisfactory. If there are lacerations of the cervix, these should be repaired at the same time curettage is done.

The routine use of the curette, and careless, incomplete application of this instrument, constitute the greatest abuse of the minor gynecological operations. When this instrument is used in routine office treatment, or is applied without proper preparation of patient, it is fraught with positive and far-reaching danger. Every gynecologist meets constantly with cases of inflammatory diseases of the appendages in which the patient's invalidism dates from such treatment of some simple uterine trouble. Incomplete curettage is quite as harmful as to do the operation without careful aseptic precautions. To open up lymphatics and veins and tear up the infected mucosa and only partially remove it, is an invitation for renewed and active infection. This procedure has been likened to raking over a patch of ground after seeds

have been scattered over it. When curettage is resorted to, the sharp curette alone should be used. The patient should be prepared the same as for any other operation upon the vagina and uterus. The operation should be done under general anesthesia. After the curettage has been carefully completed, the uterine cavity should be irrigated with hot sterilized water, and an aseptic dressing applied over the vulva. Werth has shown that prompt regeneration of the mucosa takes place after curettage. The uterus is admirably poised by its normal position for drainage. Gauze packing does not facilitate drainage, and by stimulating contraction of the uterus causes a great deal of pain. Hemorrhage seldom accompanies or follows the operation in sufficient degree to require gauze packing. No destructive chemical agents should be applied to the endometrium either before or after curettage. Their antiseptic efficacy is doubtful, and their local effect is harmful.

THE NAUHEIM TREATMENT IN MYOCARDIAL DISEASE.*

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The nutrition of the heart muscle depends upon a good coronary circulation and a healthy trophic nerve supply, as well as upon pure blood and normal general condition. Impaired vasomotor tone has as deleterious effects upon the circulation in the myocardium as upon other structures of the body; therefore it is desirable that these factors should be borne in mind when therapeutic measures are directed toward the restoration or improvement of heart strength in cases showing failure of its normal vigor. Whatever means will help toward establishing a free flow of blood through the myocardium and a stable innervation of the heart, are as valuable as means directed toward the alleviation of anemia, toxemia, or a weak state of the general health. It will usually be found that baths, gymnastics and allied therapeutic measures not only favorably influence the general state of the patient, but also exert a decidedly happy effect upon the muscle of the heart and upon its innervation. In explanation of the beneficial effects of saline baths and exercises upon the heart, the Schott brothers held that the contact of the salt so-

*Read at the Buffalo Academy of Medicine, Oct. 11, 1896.

lution upon the terminal nerve filaments in the skin sent therefrom a reflex influence to the centers in the brain and spinal cord, and from these centers there was transmitted a healthy stimulus to the heart. While this is probably true and important, yet it does not account for all the phenomena observed. As a further explanation it is reasonable to assume that the baths exert a powerful excitation of the skin, and under this influence the superficial blood vessels freely dilate and a greater arterio-capillary space is thrown open for the discharge of the blood from the large arteries and the heart. In this manner intraventricular blood pressure is nicely lowered, the distended heart is allowed to contract, and the organ that is so wonderful in its staying and recuperative powers labors on under a lessened load. The arterioles, constituting what has been so aptly termed by Woods Hutchinson "the skin heart," are urged into renewed activity, contracting and relaxing rhythmically and forcing the blood onward in smooth and steady stream, in harmonious and auxiliary action to the heart.

These normalizing influences upon the circulation are soon followed by improved general metabolism; the urine increases in quantity, the function of the liver is restored, and the heart muscle invigorated because of a better coronary circulation and better trophic conditions. An important factor also is the stimulation to the hematopoietic organs, as it is commonly observed that the blood improves under the bath treatment.

As regards the effect of the resistance exercises upon the circulation, many interesting observations have been made and none more valuable than those of Drs. T. Lauder Brunton and F. W. Tunnicliffe* upon "The Effect of Resistance Exercise Upon the Circulation in Man, Local and General." They cite the investigations made by Ludwig and his pupils, in which it was found that the circulation was hastened in a muscle during its contraction, and that immediately after its contraction more blood passed through it than at any other time. Brunton and Tunnicliffe also mention the experiments made in 1892 by Chauveau and Kaufman upon the circulation in the masseter of the horse before, during, and after mastication, by which it was determined that more blood flowed through the muscle during its contraction than during its rest, and also that vaso-dilatation accompanies contraction, thus favoring a free flow of blood.

The general blood pressure is also affected by muscular exercise, its degree and duration depending upon the vigor and length of the exercises. Thue Oertel and others observe a rise in the general blood pressure following muscular exercise that was some

* British Medical Journal, Oct. 16, 1897.

what prolonged and severe, whereas Brunton and Tunnicliffe found that during the first part of gentle muscular exercise the general blood pressure is raised, but soon falls, even during the continuance of the exercise, and goes on falling after the muscles are at rest, remaining below normal for a half hour or so, then slowly rising to its normal point.

It will be seen from the foregoing observations that we have in resistance exercise a means of influencing not only the circulation in voluntary muscles throughout the body, but, probably, also the circulation in the heart itself. The moderate increase of work demanded of the heart by the heightened general blood pressure consequent upon exercise determines an increased blood supply to the myocardium, while the subsequent fall in general blood pressure allows a period of comparative heart rest.

In addition to the effect upon the circulation of the myocardium, there is probably exerted a beneficial effect through the cardiac ganglia, as physiological activity is accompanied by various central and reflex stimuli.

The essence of the results that are desired from the method seem to be, first, that the arterioles and other blood vessels may be induced to carry on their full share of the circulation and thus relieve the heart; and second, that the circulation, nutrition and strength of the heart muscle may be improved. In valvular disease the method has been found most successful. Theodore Schott has seen thousands of cases more or less permanently improved, while many others have also had successful experience with it. Robert H. Babcock, of Chicago,* in an excellent article upon the subject, reports markedly beneficial effects of the Nauheim treatment upon his own heart, and again, in a subsequent communication,† tells of nineteen cases under his care, most of whom received benefit. W. Bezly Thorne has published a well-known brochure upon "The Schott Methods of the Treatment of Chronic Diseases of the Heart," in which he cites most satisfactory results in a variety of cases, and in another contribution to the literature of the subject‡ he carefully discusses the rationale of the method and summarizes the affections of the heart and blood vessels which may advantageously be treated, as "those in which therapeutic indications point to the reduction of peripheral resistance, and to the repair of damaged or degenerated cardiac and vascular structures." Heinemann, of New York, has called attention to the value of the treatment in angina pectoris (stenocardia), and among others who have employed and written upon the method in this country are S. Solis Cohen and

* Journal American Medical Association, Nov. 11, 1893.

† New York Medical Journal, Dec. 8, 1894.

‡ British Medical Journal, March 9, 1895.

Camac, who reports cases treated in Dr. Osler's wards at Johns Hopkins. I commenced using the treatment in 1893, and the striking results obtained in a number of cases encouraged its most extended employment.

Of the very happy effects observed in valvular disease I will not speak further, as my object here is to emphasize the importance of the treatment in myocardial disease. Undoubtedly many cases of degeneration of the heart muscle do not come under the physician's observation, and the condition may not be discovered until after death; or the services of the physician may be sought for some complaint other than that of the heart and he then notices the weak circulation. These are the cases in which sudden deaths occur from rupture of the ventricle or so-called "heart failure." The symptoms directly depending upon the state of the heart are usually precordial distress or pain, shortness of breath upon exertion, some cough, vertigo, slight cyanosis, varying degrees of oedema of the legs and feet, scanty urine and depression of spirits, with a failure of mental force. The signs usually consist of weak or imperceptible apex beat; weak, short first sound, sometimes valvular in quality, with weak aortic second sound and somewhat accentuated pulmonic closure. It is noteworthy, however, that in some cases the heart sounds are tolerably clear and strong, notwithstanding the existence of myocardial change. The area of precordial dullness is usually somewhat increased.

Babcock, Heinemann, Thorne and others have reported excellent results from the treatment in such cases and among a moderate number that have come under my care, the following will serve as illustrations:

Case I.—Male, aged 56, for a year noticed precordial pain upon the slightest exertion. He could not speak without halting in his speech every few words to take a breath; indeed, breathlessness and pain were his two marked symptoms. His heart sounds were weak and the precordial area of dullness was slightly increased to the left. Under baths and gymnastics, the symptoms almost entirely disappeared, but after over attention to business and too great physical strain they recurred; he then went to Bad-Nauheim, where he improved, and after his return was better for several months. He has just come from Nauheim again and is feeling well.

Case II.—Woman, aged 60, presented frequent pulse and weak, irregular heart; she had considerable cough, slight cyanosis and dizziness; felt weak and tired and was troubled with insomnia. She was too obese, weighing 194 pounds. Under baths and exercise for four weeks all the symptoms abated, and the

heart grew more regular, while the pulse was fuller and stronger. In this case the heart sounds at first were impure and indistinct; after treatment they were better in quality, approaching more nearly the normal. Owing to her very large breast it was not possible to define the boundaries of the heart.

Case III.—A man of 62, complaining of the precordial pain radiating at times to his left arm, sometimes to his right chest; pain was accompanied by shortness of breath and both were precipitated by walking. His face presented a marked pallor, waxy in type, and dark circles were noticed under his eyes. The capillary circulation in this, as in the other cases, was decidedly poor. The baths were not taken, but the exercises were carried out with precision for six weeks. The symptoms were controlled and the pulse improved in volume and strength.

There is little use reciting similar cases; the point of emphasis is that persons suffering from anginal symptoms, pronounced weakness of the heart, moderate cardiac dilatation, without apparent valvular disease, and other manifestations pointing to myocardial disease, receive much benefit from the treatment.

During our first experience with the method we used hydrochloric acid and sodium carbonate to develop the carbonic acid gas in the baths, but at Dr. Stockton's suggestion charged soda water was added to the saline solution. This proved to be a valuable innovation, as the patients distinctly felt a tingling warmth of the skin upon its contact with the gas and the capillaries of the surface of the body were filled with blood, as was attested by a healthy pink glow.

The *modus operandi* of the treatment has been considered at sufficient length to account for the improvement noted in these and other cases, and it would seem that its more extended employment should be urged. Perhaps many useful years might be added to the lives of those suffering from myocardial disease, and we may rely upon baths and resistance exercises, at all events, to relieve precordial distress and pain by lessening intracardial blood pressure, and simultaneously to minister towards an improved nutrition of the heart.

Etiology of Nasal Polypi.—Jonathan Wright (*Laryngoscope*, April) concludes that these pseudo growths may result (1) from mechanical obstruction to venous return by the products of inflammation in the mucosa or in the underlying bone, or (2) from the vasomotor phenomena accompanying chronic inflammation, or (3) from the vasomotor phenomena present in neuroses, which may give rise to hay fever and bronchical asthma.

HAEMATURIA DURING SIX MONTHS OF GESTATION AND TWO AND ONE-HALF WEEKS AFTER. REPORT OF A CASE.

By P. D. ROTHWELL, M.D.,
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Mrs. J. B. H., aged 33, pregnant with fourth child, was first seen by me January 17, 1899. Gave history of persistent haematuria since the third month. The physician then called, after making an examination, affirmed that the bleeding was from the womb and so maintained during his attendance, a period of over two months. He impressed the fact that it was a case of placenta praevia and that any time the gravest hemorrhage might occur. The blood appearing at the time of urination, and at no other time, was said to be due to the womb's contracting in sympathy with the bladder, forcing out the blood far enough to be washed down with the urine. Strange to say, that when this physician left Denver to practice in one of our mountain towns, he failed to leave Mrs. H. in care of another physician; a period of almost two months elapsing, during which time there was constant dread of impending calamity.

My first visit found me unprepared to trace the source of the haematuria, but the patient was assured that no time would be lost in determining whether or not it was a case of placenta praevia; that there were physicians in Denver with more experience than belonged to me, and that I would not hesitate a moment to call them to my assistance, if the investigations were not satisfactory to myself. Catherization next day showed the urine bloody, and, as the patient's mother said at the time, "The doctor has settled it already." The relief afforded by this inquiry was very marked and the sleep that night was most refreshing. Why did not the first physician try this simple plan? Finding blood on his fingers after his first examination, and knowing that the womb was the most probable source, his mind was made up and everything was warped to suit that opinion. There is not one of us that has not done just this very thing.

It was now in order to determine whether the lesion was in the kidneys or bladder. Carefully conducted microscopical and macroscopical examinations fixed the lesion in the bladder, and the following reasons lead to this conclusion:

1. There was no tenderness in the region of the kidneys.
2. Often the blood had a bright arterial color, suggesting the source to be not far from the meatus urinarius. (In severe

injuries of the kidneys this, of course, would not be a satisfactory reason.)

3. There were no long, dark clots, like earth-worms or quill barrels, to indicate bleeding from the pelvis of the kidney and subsequent moulding of the blood in the ureters.

4. The clots were large, irregular edged and generally scarlet.

5. The blood appeared toward the end of urination, as a rule; the beginning was often clear.

6. When the urine was put in a conical vessel the sediment was quickly formed. This is in marked contrast to a case of haematuria of renal origin under care at the same time. The mixing of blood and of urine was so intimate in the latter that the sediment would not form for several hours.

7. The ratio of the albumin to the haemoglobin was such as to show that the blood present would account for the albumin.

8. The microscope showed neither blood casts nor granular casts.

9. The blood cells retained most of the coloring matters which they did not in the case above referred to.

10. The quantity of urine was normal.

There were at times marked deviations from these general statements. If we grant that, taken as a whole, these facts are sufficient to pronounce the case as one originating in the bladder, what was the probable cause? The dragging of the uterus upon the bladder. The abdominal muscles were very weak and the gravid uterus swayed backward and forward and from side to side to an unusual degree. In former cases, the patient became almost helpless toward the eighth month. The condition was worse this time, and at the beginning of the eighth month she took to bed and remained there till recovery. There was no interference on my part. I believed that when the cause was removed the symptoms would disappear.

On March 24th a fine, well formed, healthy ten-pound babe appeared. The recovery was uninterrupted. Involution a little tardy, haematuria continuing till it was almost complete. At the end of three weeks a careful examination of the urine showed absence of albumin and blood corpuscles. There was no medicine given to bring about this result and no claims made that drugs had anything to do in bringing it about. The rest in bed was a necessity as the patient could not stay up. The appetite was good and the bowels and skin active.

Looking at the case now, it seems to me that there is more credit due for what was not done than for what was done.

HOW TO EFFECT THE EXPULSION OF THE PLACENTA AFTER CHILD-BIRTH.

By R. G. WOODWORTH, M.D.,

Pueblo, Colorado.

No more trying time falls to the lot of the physician and none involving greater responsibility in the course of labor than that immediately following the delivery of the child.

I have read not a few books upon obstetrics which presume to state all that should be done and what should not be done at this critical period. One says traction should be made upon the cord; another, that pressure externally only should be made, and still another, that while pressure is being made with one hand upon the abdomen, slight traction should be exerted upon the cord; another, that pressure externally only should be made; every work to explain the dangers of this or that method. It is pretty nearly conceded by all writers now that neither traction alone nor traction and pressure combined are admissible in the extraction of the placenta, but that it should be effected wholly by external manipulation. I believe this to be very good teaching, with one exception, which I shall proceed to mention further on. If you scan the various works on obstetrics extant, you will often be struck with the emphasis which writers place upon what should be done under a given circumstance, but the details how it should be explicitly accomplished are very meager indeed. Now it is this notorious and lamentable deficiency which induces the writing of this article. If a writer on obstetrics teaches that the delivery of the placenta should be effected by external pressure over the womb, does that imply that the directions are sufficiently explicit for the physician, who is not a sage in this line from experience, to go ahead and succeed in delivering the placenta. No, not by any means. Why not? For the reason that the details of the application are wanting. Nothing is said precisely how that pressure is to be exerted, and nothing is said as to the dangers resulting from a wrong application of that pressure.

It is true that many cases we all have, where by slight friction over the womb the placenta is expelled, but no one can doubt that if sufficient time were allowed the womb would accomplish this without either the friction or the pressure. Many encomiums are easily won from the laity for which no adequate skill commensurate with the praise has been exhibited, but it is those

cases whose successful termination warrant whatever approbation may be bestowed to which I wish to refer.

The method which I follow with excellent results, stated as plainly as my language will allow, is this: After the delivery of the child I note for a few minutes the contraction and relaxation of the uterus. After a repetition of this for a few times, I feel quite certain there exists no immediate danger from hemorrhage, and it is then I begin the delivery of the placenta by *bimanual pressure*. How do I apply the pressure? Take your place beside the mother, press the finger tips down upon the abdomen (the right hand on the right side of womb, the left on the left) beneath the womb, so as almost completely to encircle the same by both hands, and then, not by pressing the womb down and backward against the spine, but sustaining and supporting it, and, if need, gently carrying it toward the vaginal outlet, begin to *squeeze* it, exerting firmer and firmer force until you are rewarded with the appearance of the placenta and all coagula.

If I have made you comprehend my explanation I think you will believe, as I am fully convinced, that this is the ideal way. Pressure with one hand can accomplish nothing in a womb that is not able to take care of itself if sufficient time be allotted. Pressure with one hand has no sustaining power over the womb and only tends to drive it out of place. Pressure with traction on the cord simultaneously is a dangerous procedure, as the pressure is apt to be slight compared with the traction, and, as stated before, tends to displace the uterus. Traction exclusive of pressure is the most dangerous, as this is done with no reference to the contractions, and hence can only result in facilitating the occurrence of hemorrhage. These methods are quite likely to be followed by retention of portions of the secundines, and expose the mother to the additional danger of puerperal fever. Bimanual pressure not only secures safety against retention of any portion of placenta, but also accomplishes the expulsion of all coagula.

For aught I know the directions I have attempted to emphasize and elucidate may be just the ones writers on obstetrics have attempted to render obvious in their works. But as I said before, I searched for some definite scheme by which external pressure might be applied efficiently and skillfully, without detriment to the mother, and as a means of successfully avoiding those grave dangers of hemorrhage, retention of secundines and puerperal fever.

The exception to the successful achievement of bimanual pressure exists, if it exists at all, in strongly adherent placentae of a period less than full term. Such a case I had only this morning, May 21, 1898, in which premature labor came on at

seven and a half months. The bag of water ruptured before I was called and before the uterus had dilated to the size of a five-cent piece. The child was delivered nicely, being a pretty dry labor, but when I attempted bimanual pressure for the delivery of the placenta I found it of no avail. The placenta was rigidly adherent and there was a strong temptation to pull on the cord; this I resisted, and so resorted to the only alternative of detaching same with hand; this accomplished, I again resorted to bimanual pressure, whereupon the uterus was emptied of placenta and clots with the facility of driving a cherry seed from its bed by pressure between thumb and finger. I believe every placenta of full time may be driven out by bimanual pressure *in toto*, together with all coagula, with dispatch and with a self gratification highly pleasing to the accoucher. I shall here narrate a little experience which came to me several years ago at a time when I had no effective and settled plan in my own mind as to the delivery of the placenta. I was taught it was to be accomplished by external pressure (?) and friction. The child was born, and I spent probably half an hour employing pressure and friction, but all to no avail. The nurse in this case—a professional midwife—growing tired, I suppose, at my ineffectual attempts, said: “Let me get the afterbirth for you.” She took the cord, wound it several times about one hand, and, seizing this hand with the other, pulled forcibly upon the cord, giving a grunt—may be of delight—as she saw the stubborn thing come away. In this instance no harm was done, I was wiser, and resolved to find a more acceptable and efficient means of accomplishing the delivery without hazarding in any way the life of the mother. Safe to say, this woman and any other who does as she did remain very dangerous personages to jeopardize the lives of mothers by so notoriously wicked a procedure in so delicately exclusive a calling as accouchements.

Gross Commencement.—The Gross Medical College held its twelfth annual commencement exercises at the Tabor Grand Opera House, April 25th, 1899, graduating a class of fourteen.

The Western Clinical Recorder.—This is a new bimonthly medical publication, designed especially for the general practitioner. It is published at Ashland, Wis., and is conducted by Drs. Fred Jenner Hodges and Wm. T. Rinehart. It appears to be a useful and practical periodical, and we are therefore pleased to make its acquaintance.

OTITIS.*

By HUGH BLAKE WILLIAMS, M.D.,

Chicago, Illinois.

The more I see of chronic suppurative inflammation of the ear, the more convinced do I become that the element of chronicity is due to lack of thoroughness in treatment. The method of procedure mapped out below will not succeed in cases where necrosis has occurred, but in all others it will reduce the duration of treatment from months and weeks to days.

The patient is placed upon the side, with the affected ear up. The concha is filled with Marchand's Hydrozone, which is allowed to remain until it becomes heated by contact with the skin, when, by tilting the auricle, the fluid is poured gently into the external canal. The froth resulting from the effervescence is removed with absorbent cotton from time to time and more hydrozone added. This is kept up until *all* bubbling ceases. The patient will hear the noise even after the effervescence ceases to be visible to the eye.

Closing the external canal by gentle pressure upon the tragus forces the fluid well into the middle ear, and in some instances will carry it through the Eustachian tube into the throat. When effervescence has ceased the canal should be dried with absorbent cotton twisted on a probe, and a small amount of pulverized boracic acid insufflated.

The time necessary for the thorough cleansing of a suppurating ear will vary from a few minutes to above an hour, but if done with the proper care it does not have to be repeated in many cases. However, the patient should be seen daily and the hydrozone used until the desired result is obtained.

Care is necessary in opening the bottle for the first time, as bits of glass may fly. Wrap a cloth about the cork and twist it out by pulling on each side successively.

In children and some adults the hydrozone causes pain, which can be obviated by previously instilling a few drops of a warm solution of cocaine hydrochloride. In this note it has been the intention to treat suppuration of the ear rather as a symptom and from the standpoint of the general practitioner.

* Abstract from The Alkaloidal Clinic of Chicago for January, 1890.



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We will at all times be glad to give space to well written articles or items of interest to the profession.

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EDITORIAL DEPARTMENT.

The Climate of Colorado. The fame of this state as a health resort for pulmonary invalids is world-wide.

The climatic advantages are principally these: Rarity of atmosphere, depending on altitude, and accompanied necessarily by a low barometric reading; rapid radiation, resulting in cool nights; comparatively little moisture, hence speedy evaporation, but little specific heat and a marked difference between sensible temperature and that of the dry bulb; plenty of sunshine, with all its beneficial effects upon metabolism and hematosiis; and dilution of bacteria and other organic matter, with abundance of fresh air.

The disadvantages of the climate consist for the most part in the liability to sudden weather changes. Wind and dust storms are of common occurrence in the spring time, though we have never experienced an

actual cyclone. Last winter's weather was on the whole but little better than in the eastern states.

Practically speaking, whatever benefits accrue to phthisical patients by making their residence in Colorado, depend upon the pulmonary calisthenics and improved ventilation of the lungs necessitated by the deeper breathing required in order to get the requisite amount of oxygen to the blood. All persons here, not native, develop in time an appreciable expansion of the chest capacity.

The prescription of climate in order to do good requires as much discrimination as the administration of any other remedial measure. Not every one afflicted with consumption should be advised to go to Colorado. If the tuberculous patient is in an early stage of the disease, is in comfortable financial circumstances, a good traveler and not given overmuch to homesickness, he is likely to do well here. If, on the other hand, he is nearing the grave and is without money or friends in this region, nothing could be more inhuman of a physician than to carelessly advise him to leave his home and kindred and seek a living in Colorado.

That the climate alone is a preventive of consumption is disproved by the experience of nearly every local physician, as well as by our vital statistics, which show an increasing ratio of endogenous phthisis. For instance, in 1893, out of 435 deaths from tuberculosis in Denver, the disease was specified as contracted in Colorado in 49 cases; in 1898, of 501 total deaths from consumption, 99 were specified to have originated in this state. In other words, the ratio of endogenous phthisis has increased in five years from one in nine to one in five. The moral is simply this, that tubercular patients should keep away from populous health resorts and make their residence instead in sparsely settled districts.

Tuberculous patients who have much fever and dyspnea will often do best by spending their summers in Colorado and their winters in the mild, dry regions

of Arizona or New Mexico. Persons with serious organic heart disease should never come to Colorado. Nasal troubles tend to pass into the sclerotic stage here sooner than at lower altitudes. Nervous tension appears to be increased in susceptible individuals. Diarrheal diseases are usually mild and readily controlled.

**Governor Thomas
and the Medical Bill.**

The Cannon bill, to regulate the practice of medicine and protect the public health, passed both houses of the legislature by a good majority, in spite of the frantic opposition of all sorts of "healers" and "heelers." It went through solely on its merits; not a cent was spent to influence votes directly or indirectly. While not so stringent a law as most of the states and territories have at the present time, being from necessity a compromise measure, the enactment was a decided improvement on the present loosely framed law upon this subject. It provided, briefly stated, that every one who would treat the sick for a consideration should know at least the fundamentals of medicine as evidenced by an examination before an impartial state board.

Gov. Thomas has vetoed the bill and in a vaporous discourse of 4,500 words he attempts to excuse himself therefor. In this labored effort he betrays himself as petifogger and stoops to the most malicious misrepresentation of the medical profession as a body.

He declares that the bill should not be signed, since "medicine is not a science which has reached perfection, but merely a series of experiments." If to attain perfection is necessary to constitute a science, then geology and astronomy and zoology are not sciences; for every year new rocks, new stars, and new animals are studied and classified. If medicine is only a series of experiments, then it is such a series as has banished the plagues of the past from civilized countries; it has lengthened the life of mankind; it has reduced the mortality from phthisis to one-third what

it was sixty years ago; that from smallpox to less than one per cent. of the death rate of last century; that from diphtheria to one-fourth what it was but ten years ago.

With the cheap palaver characteristic of the demagogue, the gubernatorial gabbler prates of trusts, insinuates that the doctors are mercenary and selfish and insists on the immemorial right of the American people to be humbugged. A state examination for teachers is not generally considered to make a pedagogic trust, and we understand that even horse-shoers are required by law to undergo a preliminary training before being allowed to set out in the world for themselves. Are the hoofs of horses of more value than human life and health, Gov. Thomas? The mercenary motives of the regular medical profession are well shown perchance by their endeavors to check the spread of infectious disease and to enforce a good water supply.

With that sympathy which is a fellow feeling, Gov. Thomas can find no praise too high for the advertising quack who has a "sovereign remedy," while he sneers at the conservatism of regular practitioners, and shows his marvelous consistency by affirming, almost in the same breath, that material means are of no use in sickness and intimates that there are no cures except faith-cures.

If Gov. Thomas were honest and manly he would have stated simply that he vetoed the measure for personal, political and pecuniary reasons—or he might better perhaps have remained quite silent as to his motives. He has chosen instead to envelop the deed in a mass of puerile calumny.

It is a noteworthy fact that the morning and evening slop-barrels, the abortion—mongering daily press, the vile harpies of the ink pot, whose chief aim and end is to fructify fraud and to propagate vice—are unanimous in endorsing the veto of the medical bill.

And why? Because their largest source of revenue is in the immoral and nauseous advertisements of charlatans and "personals."

Now, what does our noble and high-minded executive hope to gain by the veto of the medical bill? These are some of his great expectations: The uncertain support of the quack-supported newspapers, none of whose candidates for mayor was successful at the spring election; the brotherly esteem of every mountebank in Colorado, including the large additional number whom the governor's recent welcome address will draw to the state within the next two years; the affectionate regard of every worn-out prostitute, posing as a magnetic healer; the fraternal love of all the bigoted old pharisees of "Christian Science," who are making the scriptures a stalking-horse for private greed; in short, the political favor and assistance of ignorance and imposture in general, especially those phases which fatten on bodily ills.

Gov. Thomas does not dare to say that the bill he has vetoed would not have been an improved protection to the public health. Instead of this he maintains it is better for quackery to ramp and for fools to be duped and even done to death, than to raise the standard of a profession which has more to do with the weal of mankind than all the others combined. He derides the medical profession and adds insult to injury, yet he will seek to tear it down rather than to make it better. He has vetoed a measure the like of which has proved acceptable to the people of thirty-one states and territories, none of which, perhaps, had a governor like ours, however, with a brain more massive than the combined intellect of the whole legislature.

Will the decent and sensible people of the state uphold his excellency in sanctioning dense ignorance and blatant quackery and the obtaining of money under false pretenses? We think not.

"Every dog has his day." "So has the Thomas cat."

Dr. Hughes Resigns. Dr. T. A. Hughes, of Denver, has resigned his position as member and Secretary of the Colorado State Board of Examiners. Dr. Hughes has been for ten years a member of this Board; during all this time he acted as Secretary. Dr. Hughes has done most excellent and efficient work. He has worked all these years earnestly, receiving practically no remuneration. The tax upon his time was great. The medical profession is greatly indebted to Dr. Hughes. We regret exceedingly that the Doctor's health and his duties professionally made it necessary for him to sever his connection with the board. Dr. C. K. Fleming has been elected Secretary to fill the vacancy made by Dr. Hughes.

The Daily Press and Quacks. The newspapers and quacks were severely arraigned by the Hon. A. B. Seaman in his address to the graduating class of Gross Medical College, of April 25th. Mr. Seaman inveighed in most vigorous terms against the immoral advertisements that appear in the daily newspapers and deplored very greatly the tendency on the part, not only of the newspapers, but of the politician and men in high positions, to cater to the charlatans and especially to Christian Science and other modern fakisms.

Denver's Climate. It is unusual for large cities to be ranked as health resorts. In this respect Denver is unique, for it is the only city of any size in the United States which from the beginning has deserved and still continues to deserve the reputation of being a health resort. The conditions that tend toward healthfulness in Denver are both natural and artificial. Our climatic resources have been aided rather than retarded by the conditions of the city's growth.

The elements of climatic advantages possessed by Denver are those common to the greater part of Colorado, New Mexico and Arizona. An altitude of more

than five thousand feet above the sea level makes the air much rarer than it is at lower altitudes, and as a result those suffering from diseases of the lungs find it necessary to expand them more fully in order to carry on respiration. The result of this deeper breathing is that diseased conditions are slowly but certainly modified for the better, provided, of course, that the patient has come to Colorado with a sufficient area of usable lung to keep him alive.

Added to this rarity, the atmosphere of Denver possesses the quality of dryness. The air does not carry half as much moisture in suspension as it is capable of carrying; in eastern cities it carries more than three-fourths of its possible capacity. This dryness also assists materially in benefitting diseased conditions of the lungs.

The third and greatest factor of our climate is sunshine. Taken the year 'round, and year in and year out, Denver averages more than seven hours of direct sunshine every day. There were four months in 1897 and three months in 1898 when the sun shone strongly more than ten hours of every day. W. P. M.

Climatic Conditions From time immemorial it
that Benefit Consumptives. has been observed that
change of climate has exercised an influence upon the health of the person making the change. In some instances the influence has been beneficial and in other instances it has been the reverse. A very brief consideration of the general effect of certain climatic factors upon certain conditions may very properly precede the study of the specific influence exerted by specific climatic conditions upon a specific disease.

It must not be supposed, because a person resides in a certain district, that his physical condition is therefore of necessity the result of the true climatic influences that are operative in that locality. He may live or labor in an artificial environment which in a

more less large measure modifies or neutralizes the effects that would naturally come from the climatic conditions there existing. As examples of this fact, we may note the occurrence of consumption in miners who have lived for many years at an altitude of 9,000 or 10,000 feet. It is possible for any person to make for himself, even in the most favored locality, an environment which will entirely neutralize all of the beneficial influences and substitute therefor an artificial condition as bad as anything that nature has ever contrived in the most unfavorable regions.

Climate is something that exists out of doors. It is largely atmospheric. The conditions that modify climate are the conditions that modify the state of the atmosphere. Briefly stated, altitude modifies climate through its influence upon the atmosphere by rarefying the air; by lessening the resisting power of the air to the rays of the sun, or as it has been otherwise expressed, by increasing diathermancy; by lessening the extent to which the air will hold moisture. The effects of atmospheric condition upon human life and its vital processes must be considered a little in order that it may be better appreciated.

It is at once apparent that the same amount of oxygen that is necessary for respiration at a lower altitude will in the rarefied atmosphere be contained in a greater bulk of air, and that the patient, in order to receive a sufficient amount of oxygen to supply the demands of nature, must inspire more deeply, and perhaps more frequently. This deeper inspiration tends to open more thoroughly the deeper bronchioles and those portions of the lung that have begun to be disused or that tend toward consolidation. A rarefied atmosphere, therefore, tends to cause greater expansion of the lung tissue, and, if it be not too rare, to accomplish this with some degree of safety.

Rarefied air probably carries with it a smaller number of micro-organisms than does the air at sea level. It certainly carries a smaller amount of moisture.

The absence of these two factors makes rarefied air less likely to cause irritation of the bronchi and lungs than does air that carries a goodly share of moisture and dust. Up to a certain point, which may be designated as the limit of tolerance, rarefied air exerts a stimulating effect upon the vital processes generally. This has been observed in so many instances that it has become almost axiomatic to refer to the stimulus of the dry, rare air of our mountain regions.

Diathermancy is that quality of air which enables it to readily allow the passage of the sun's rays without interposing resistance. It is a direct result of the rarefaction due to altitude. It is noted that the degree of heat developed in any substance exposed to the sun's rays is therefore greater than at low altitudes, while the amount of radiated heat, that is of apparent heat, in the shade is much less. There is thus in high altitudes a great contrast between the apparent heat when in the shade and when exposed directly to the sun. It is also supposed that the direct sunlight carries with it more noticeable invigorating influence in the altitudes than at sea level; in how far this supposition is correct we are left largely to conjecture, but it has been suggested that if the supposition is correct it may in these latter days be explained on the hypothesis that sunlight carries with it a certain proportion of X-rays, which are more tangible at high than at low altitudes. The guess is given for what it is worth.

Dry air has long held a place in the list of therapeutic influences at our command. In most regions of high altitudes, and especially in the Rocky Mountain region, the air is noticeably dryer than at low altitudes. Years of careful observations, recorded by the United States Weather Bureau, furnishes proof of this fact. A dry air is valuable for many reasons. It is less likely to maintain the vitality of micro-organisms; it is less likely to assist in breaking down processes in the respiratory organs; it is more likely to abstract moisture from the tissues of the lungs and thus will tend to

promote their ready opening to atmospheric pressure when the greater effort at expansion has called for a greater bulk of air to satisfy the requirements of respiration.

The air in such regions as the Rocky Mountains has other qualities that are quite separate from those given it by altitude, though in a measure dependent upon that condition for their existence. This air is, in all places, more free from micro-organisms than the air of lower, more densely settled and longer settled regions. This freedom from bacterial contamination is by no means absolute; it is simply relative and is due to the fact that great aggregations of population have not as yet had opportunity to vitiate the atmosphere or to create permanent centers of infection. And then the proximity of high mountains to such cities as have already started into existence gives opportunity for rapid and complete change of air through the sweep of the mountain winds, that come from practically virgin heights, and each day completely drive out the vitiated air that has been the result of the day's activity of several hundred thousand bodies. W. P. M.

Healthfulness of Denver. The sanitary progress of the world has been considered to be well represented by the results obtained in lessening the mortality rates in London, the largest city of the world. In Albert Shaw's great work on "Municipal Government in Great Britain," he has succinctly stated these results for London in one short paragraph. In order that the results of progressive sanitary improvements in Denver may be compared with the bulkier results of London, I have placed Shaw's statement for London and a similar statement for Denver in parallel columns, the Denver statement being but a paraphrase of the London one, with the difference that Denver's name and figures for the past thirteen years have been substituted for purposes of comparison.

LONDON.

As a result of public improvements and reforms in the sanitary administration, imperfect though these reforms have been, the death-rate of London has been reduced from more than 30 during the half century from 1800 to 1850, down to the present average of about 20 per 1,000 per annum. This means in a population of 5,000,000, a saving of 50,000 lives per year. It means of course the prevention of a vastly greater number of cases of sickness, a marked increase in the average duration of life and an important conservation of the strength and wealth-producing energy of the people. The saving of 500,000 lives in every decade in the one city of London as a result of improved public arrangements is a triumph for sanitary science that may well encourage further efforts.

DENVER.

As a result of public improvements and reforms in the sanitary administration, imperfect though these reforms have been, the death-rate of Denver has been reduced from 19.4 as the average rate per 1,000 per year during six years from 1886 to 1891, inclusive, down to an average rate of 12.13 during the seven years just ended, or the still lower average of 11.18 during the past four years. This last means, in a population of 160,000, the saving of 1,315 lives per year. It means of course the prevention of a vastly greater number of cases of sickness, a marked increase in the average duration of human life, and an important conservation of the physical strength and wealth-producing energy of the people. The saving of 5,260 lives in four years, or 13,150 in every decade, in the one city of Denver as a result of improved public arrangements is a triumph for sanitary science that may encourage further efforts.

Sanitary administration of almost all the large American cities has been increasing most remarkably in efficiency during the past ten years. Very recently the *Philadelphia Medical Journal* gave publicity to certain figures from Buffalo and claimed that that city was thereby proven to be the healthiest large city in the world. Buffalo is certainly a healthful city and Dr. Wende's excellent administration of its health department during the last eight years is responsible for it. But if we may speak of cities of over 100,000 in population as being "large," then Denver is certainly not only the healthiest large city in America, but in the

whole world, for we must remember that 20 per cent. of even our present low annual death loss is due to imported tuberculosis.

W. P. M.

**Patients Not Fitted
for Climatic Treat-
ment in Colorado.**

So many unfit patients are sent to Colorado that it is necessary to call attention to the subject frequently. One cannot practice here long without becoming impressed with the idea that physicians occasionally send tuberculosis patients in the last stages here in order to get rid of them. I have, for instance, seen many consumptives die in our hospitals within three weeks after arrival in Colorado. It is absurd to think that the physicians recommending their coming here should not know the signs of the last stages of so common a disease as consumption. For a certain number of these cases my own interpretation is as follows:

A physician prescribes for a patient with a slight cough and failure of general health, giving a diagnosis of bronchitis and probably not stripping the patient's chest for examination. After some weeks or months the continuance of the symptoms and the development of others arouses the doctor's suspicions, and an examination is carefully made and a correct diagnosis attained. Feeling that he has made an error, the physician still glosses the thing over, but, with a continued progress of the disease, finally advises the patient to go West. More delay occurs, but finally, with emaciated form, cyanotic lips, flushed cheeks, curved finger nails, graveyard cough, and, too often exhausted exchequer, the poor patient comes to Colorado. He is unable to sleep in recumbent position, develops edema of the feet shortly, and, unable to return alive, dies far from home in lonely misery. I have seen dozens of such cases, and so have most other Colorado physicians. If they were only occasional I should not write of them.

The obvious remedy for this disgraceful mode of procedure is to be found in more careful diagnosis and

more frank, honest treatment of phthisical patients in their initial stages everywhere. If such patients are to come to Colorado, send them, if possible, within a few weeks of the beginning of the cough. If they cannot be sent before extensive destruction of lung occurs, be merciful enough with them to let them remain at home, surrounded by friends and home comforts, during their last hours, that they may at least die in peace.—J. N. H.

Denver's Climate. The following tables are from the reports of the Denver Bureau of Health for 1897 and 1898, being compiled by Drs. Wm. P. Munn and A. K. Worthington.

CLIMATIC NOTES FOR 1897.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
Rainfall, days with 0.01 in. or more*	4	9	9	11	9	10	9	7	3	6	4	8
Total rainfall in inches†	0.58	0.82	0.90	1.31	3.15	2.16	2.06	1.44	0.44	1.64	0.24	0.63
Possible hours of sunshine.....	301	299.4	371.2	399	447	449	445	425	374	345	300	292
Actual hours of sunshine‡	196	178.8	236.6	275	320	316	315	313	257	224	184	200
Clear days, absolute§	10	8	8	9	6	5	9	11	5	9	4	14
Part cloudy days	16	13	12	13	17	17	15	16	21	13	18	9
Cloudy days¶	5	7	11	8	8	8	7	4	4	9	8	8
Mean relative humidity, per cent..	55	54	53	52	54	54	46	53	48	50	54	53
Mean temperature, degrees.....	27	31	36	47	61	65	70	70	66	51	41	28
Mean barometer...‡	24.72	24.58	24.52	24.60	24.74	24.71	24.81	24.90	24.85	24.77	24.72	24.72
Highest barometer	25.01	25.03	24.80	24.83	25.02	24.97	25.02	30.28	25.19	25.14	25.06	25.26
Lowest barometer.	24.28	24.23	24.04	24.24	24.40	24.39	24.38	29.66	24.56	24.36	24.36	24.21
* Total, 89 days.							§ Total of 98 clear days.					
† Total rainfall, 15.37 inches.							Total, 180.					
‡ 67.8 per cent. of possible hours sunshine.							¶ Total, 87.					
§ Actual.							b Sea level.					

CLIMATIC NOTES FOR 1898.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
Rainfall, days with 0.01 in. or more ..	2	4	7	10	16	8	10	6	6	6	7	4
Total rainfall in inches	0.20	0.68	0.28	1.20	4.88	0.94	0.67	0.96	0.28	1.05	0.85	0.99
Possible hours of sunshine	301	300	371	399	447	449	445	425	374	345	300	292
Actual hours of sunshine.....	207	219	260	262	229	303	331	314	295	280	232	248
Clear days, absolute	10	11	8	9	5	11	11	14	17	16	17	21
Partly cloudy days.....	17	13	18	15	13	15	18	15	10	11	10	7
Cloudy days	4	4	5	6	13	4	2	2	3	4	3	3
Mean relative humidity, per cent..	53	49	42	50	60	48	47	45	39	41	51	55
Mean temperature, degrees	29	29	36	49	53	67	72	73	62	49	35	26
* Mean barometer..	24.64	24.72	24.59	24.73	24.67	24.75	24.81	24.81	24.76	24.77	24.66	24.78
Highest barometer	25.06	25.08	24.91	25.03	25.02	25.01	25.03	24.89	25.18	25.17	24.99	25.21
Lowest barometer.	24.29	24.19	24.04	24.22	24.39	24.35	24.56	24.52	24.37	24.13	24.12	24.23

* Barometer, actual reading.

**The Altitude of
an Ideal Climate
for Consumption.**

It seems to us there is a prevalent tendency among Atlantic seaboard physicians, and even those who reside in the interior and somewhat elevated sections, to disregard or at least to undervalue the established and proven facts of climate as regards altitudes. It ought not to be that prejudice, because of the locality in which an investigator resides, should be allowed to outweigh established evidence. Yet such seems to be the case.

Whenever a large national convention, such as an International Medical Congress, the late Climatological Congress of the World's Fair, or even when a sectional State Society convenes, claims are advanced that a given region has all the climatic requirements and other advantages for a consumptive's resort, when there is really little to back such claims beyond bare assertion. There is no way to get at the truth of this matter except to disassociate all such claims of local preferment from the basis argument. On this plan, altitude comes in for a large share of the credit and the make-up of an "Ideal Climate" for the treatment of consumption. It (altitude) varied by the far inland position of the Rocky Mountain Plateau, markedly and beneficially affects the proportion of sunshine, dryness, coolness and stimulation, which are most beneficial to the invalid.

We are pleased, therefore, to see the argument of what we will call a *compromise climate* refuted in a late number of the *Charlotte Medical Journal*, in a paper on "Relative Immunity to Tuberculosis, the Altitude of the Ideal Climate and Intra-Pulmonary Medication," in which Dr. C. Denison, of Denver, thus answers Dr. H. B. Weaver's claim for the superiority of the Asheville climate:

"Dr. Weaver says, 'an ideal climate, if it could be found, for consumption is one of moderate elevation, 2,500 to 3,000 feet.' As the preceding argument, based upon 'dryness, cold, sunshine and altitude,' is about

the same as that formulated by me over twenty years ago, [Note—'The Preferable Climate for Consumption, or the Comparative Importance of Different Climatic Attributes in the Arrest of Chronic Pulmonary Diseases,' reprinted from the transactions of the Ninth International Medical Congress, September, 1887.] and which has never been refuted, why not go on and work out the 'ideal climate' according to its legitimate conclusion up to as near 'the altitude of approximate immunity' as possible? This extreme height for your altitude (Charlotte, N. C.) would be about 7,000 feet and in Northern New Mexico. An all-the-year-round climatic home, in which to fight tuberculosis, should be if possible within one or two thousand feet of this approximate immunity altitude, and anything less, so far as rarification of the air is concerned, should be conceded only in the way of a compromise. This is such an allowance as can be made for personal idiosyncrasies, severity and acuteness of disease, nearness of good professional services, advantages of good feeding and care, and a pleasurable life.

From Central Arizona, circling around through New Mexico, Colorado and into Wyoming, is a belt of land over a thousand miles long and averaging say one hundred miles wide, extending into and out of the mountains, between 5,000 and 7,000 feet above sea level, and including the regions about Flagstaff and Tombstone, in Arizona; Silver City, Albuquerque and Las Vegas, in New Mexico; Trinidad, Canon City, Colorado Springs, Denver, Greeley and Fort Collins, in Colorado; and Cheyenne, in Wyoming. Somewhere in this belt [Note—See fourth chart (elevations) in 'The Climates of the United States in Colors.'] the 'ideal climate,' in which to successfully combat pulmonary consumption, can be best chosen, if done without reference to the difficulties of getting there and the inconvenience of a new and unsettled country.

"If you compare the 'preferable attributes' of a climate of 'approximate immunity to consumption'

with their counterparts, you will see that a health resort, though located in the mountains at an altitude of 2,500 to 3,000 feet and upon a partially clay soil, and having a relative humidity averaging say 60 per cent. of saturation and cloudiness, rainfall, etc., on like proportion, is only a half-way approach to the possible preferable choice in this large and climatically varied country of ours."

The American

Medical Association.

The fiftieth annual session of this great medical organization convenes at Columbus, June 6-9.

It is confidently anticipated that these meetings will easily equal and probably excel all previous ones. Columbus is a modern and progressive city, nearly centrally located as regards the nation's population. Its physicians are among the best in the land, and the accommodations for visiting members will doubtless be all that can be desired. "In unity there is strength," and it is mainly through such organized bodies as the A. M. A. that the legitimate and scientific medical profession can hope to stem the swelling tide of charlatanism and pious humbuggery that rises all around. Let Colorado send a good representation of medical workers to Columbus.

The Paris

Exposition.

Paris will soon again be the attraction of the world. American parties are already being made up to visit the Exposition which is to be held there next year, and for the benefit of those who wish to meet folks from their own country, a "pension," as the French call it, is to be established, where the recognized language will be straight American. It will be under the care of Prof. Arthur Wisner and his wife, who, though natives of France, have been residents for some years in New York, and are thoroughly acquainted with American ways and customs. Being well known to a number of prominent doctors, the professor and his wife hope

that their establishment will become the headquarters of the American medical profession. They have secured a mansion in the neighborhood of the Bois de Boulogne, and will have it fitted up in such a way as to provide a comfortable home for their guests. The professor has already made arrangements for accommodating a considerable number of prospective visitors, and he would be pleased to hear from others before he leaves for Paris, as he intends doing shortly. For the present he may be addressed at 605 Madison Av., New York City.

Frequency and Nature of Cancer. The marked and growing increase in the prevalence of malignant disease is exemplified by the recent statement made by Roswell Park (*Medical News*, April 1) that in ten years from now, if the relative death-rates are maintained, there will be more deaths in New York state from cancer than from consumption, smallpox and typhoid fever combined. He cites many instances to prove that the malady is inoculable and contagious. That it is also unmistakably of parasitic origin, he claims is proved by recent improvements in microscopic technic, whereby the parasites are readily visible, as well as by the success of cultures and inoculations. He says that these sporozoa or fungi can now be demonstrated in the State Pathological Laboratory to any one who is sufficiently interested to come and see for himself.

Hydrotherapy in Chronic Diseases. Baruch contributes a characteristic article to the *New York Medical Journal*, of April 1. Among other things he describes the following mild course of procedure, suitable for home treatment in chloranemia and neurasthenia. The patient stands in a warm room in a tub of water at 100° F., and receives at first rapid ablution with water at 80°, lowered one degree each day until 60° is reached, and applied in the beginning on the back alone, gradually increasing the amount of

water and extent of surface treated, as well as the duration of the procedure. Reaction is aided by brisk friction with a wash rag or bath glove. Failure to react properly, as shown by chattering teeth, cyanosis of the nails and protracted chilliness, should be combated, not by using warmer water, but by diminishing the area of surface treated and by making more energetic friction. When the patient is able to bear such ablutions at 60° over the entire body, affusions may be substituted with advantage, beginning with one basinful of water, then in a few days two, and so on to six basins, first at a temperature of 80°, gradually lowered to 60°. The water should be thrown with considerable force, upon the back only at first, then also upon the chest. The remarkable effects of increasing oxygenation produced by this treatment may be greatly enhanced by following each procedure with exercise in the open air.

Wounds of the Heart. Modern surgery has done much to modify the almost fatal prognosis of former times. According to the *International Journal of Surgery*, recent statistics show that nearly one-third of such cases get well, a little more than a third survive the infliction of the wound for some time, and a little less than a third die immediately. In regard to surgical intervention, Prof. Ninni, of Naples, reports eight cases of cardiac wounds treated by suture, in which three of the patients made a good recovery.

Headaches of the Menopause. This is a very common symptom at the "change of life," and should of course be treated according to the special cause. When due to high arterial tension, tincture of aconite, a drop every hour or half hour, is recommended as efficient by Dr. A. H. P. Leuf (*Medical Council*, April). If the elimination is deficient, he states that 5-drop doses of wine of colchicum often give surprising results. Severe throbbing headaches are often

quickly relieved by veratrum irride, 5 or 10 drops of the fluid extract, at hourly intervals as needed. If the pain is due to excitement, nothing is better than a half dram of potassium bromide in a goblet of water. In some of these cases, says the writer, especially those having large and mobile pupils, 10 or 15 drops of laudanum has a splendid effect; it is best given with peppermint to disguise the taste and odor. As a mere analgesic, with rapid action, the writer prefers 5 grains acetanilid with a grain of sodium bicarbonate.

Varioloid and Varicella. The marked similarity in many instances of these two diseases is commented upon by Dr. Frank W. Wright, in the March number of the *Texas Medical News*. He says that while varicella in a young child is easily recognized, in an adult, with profuse eruption many facts are to be closely considered, and for a day or two it may be impossible to make a positive diagnosis. The constitutional symptoms in modified smallpox are often no more severe than in chicken pox, and to the eye the eruption may be identical. The chief points of distinction are the short stage of invasion (only a few hours) in varicella, the history and course of eruption, and the usually more severe two days prodromal headache and backache in varioloid. In varicella the papular stage is very short and is seldom seen by the physician, whereas in smallpox the hard, shotty papules endure from one to three days and then all become uniform, consistent, umbilicated vesicles, not easily ruptured and turning to pustules in four or five days. The vesicles of chicken pox are not distended, are easily and early ruptured, and have not indurated edges as in variola. Papules and vesicles often co-exist in successive crops and various stages of development. The small, black central scabs from the drying up of the vesicles in varicella are very different from the late formed, thick, yellowish, pustular crusts of variola. Just preceding the characteristic eruption of smallpox

there is sometimes an erythematous redness, which may be mistaken for scarlet fever, or isolated patches, which may be confounded with measles.

**A New Method of
Demonstrating Malarial
Organisms in the Blood.**

A new procedure, which obviates eye-strain and the confusing presence of artificial pigment granules, and which is adapted to all cases where the preferable method of immediate examination of the fresh blood is not practicable, is advocated by Charles E. Simon in the *Maryland Medical Journal* of March 18. The air-dried blood films are first fixed for a few minutes in absolute alcohol, and then, after drying again, are exposed to the vapors of iodine for from ten to fifteen minutes. This is accomplished by placing some crystals of iodine in a small, well-covered glass dish, in which the specimens are made to rest, blood-side down, upon little tripods of glass or a similar contrivance, so as not to come in direct contact with the iodine. When the specimens are colored distinctly yellow, they are removed, carefully dusted with a camel-hair brush and mounted in a drop of syrup of levulose. The appearance of the red corpuscles and the malarial protozoa is now very similar to that of fresh specimens.

**A Remarkable
Case of Epilepsy.**

Such a case, in which 519 seizures occurred within forty-eight hours, is reported by Dr. Wm. P. Spratling, Superintendent of Craig Colony, in the *New York Medical Journal* of March 18. The patient, a woman, aged 22, had suffered from epilepsy since infancy. She had been in the colony a year and was apparently improving, having finally from fifteen to eighteen attacks per month, when one night she passed into the status epilepticus. In spite of the employment of opium, chloral, bromides, chloroform, narcosis, blood letting and all other known measures to check the seizures, nothing availed. The patient grew progressively

worse, developed hyperpyrexia, profuse sweats, dyspnea, cyanosis and prostration, ending in death in about forty-eight hours. Post-mortem, four hours later, and a subsequent pathologic examination of the brain by Van Gieson, revealed no certain and definite changes in its structure.

Local Treatment of Influenzal Tonsillitis. In addition to the usual internal remedies, Bishop (*Medical Fortnightly*, April 1) advocates the frequent application of hydrogen dioxide to ulcerated surfaces. He also recommends guaiacol, diluted with an equal volume of glycerin, especially if the temperature is high. "A 4 per cent. solution of potassium bromide is also grateful as a gargle or spray to the inflamed throat, and a coarse spray of a 3 per cent. solution of camphor-menthol affords relief."

Neptune's Girdle. This is a hydriatic application, consisting of a coarse linen bandage, wrung out of water at 60-65° F., and made to envelope the entire lower trunk. It is fastened in front, in an overlapping manner, so that the abdomen has a double covering, and is surrounded by a dry bandage. When used at bedtime, after bathing the parts with cold water, this measure is recommended by Joseph Collins (*Medical Record*, March 25) as of much service in the relief of neurasthenic insomnia.

Stypticin in Uterine Hemorrhage. This new hemostatic is the hydrochlorate of cotarnine, a base derived by oxidation of the opium alkaloid narcotine. It is a yellow, bitter powder, soluble in water. Prof. H. J. Boldt (*Medical News*, April 8) has found this drug remarkably efficient in the following conditions: Irregular bleeding after the puerperium, without retention of decidua or placenta; irregular bleeding at the menopause, not due to cancer; irregular bleeding, without apparent cause; post-

puerperal bleeding, caused by subinvolution; meno—and metrorrhagia, resulting from traumatic peri—and parametritis; slight and irregular losses of blood during pregnancy. In other complicated menorrhagic cases, the effects of the drug were mostly negative. The method of administration was principally per os, $\frac{1}{2}$ to 5 grains every two to eight hours, though the writer now prefers the subcutaneous route. He says that if a quick result is to be achieved an injection into the glutei of 20 minims of a 10 per cent. solution in sterile water should be given, and may be repeated in eight to twelve hours.

The Vascular Signs of Granular Kidney. The clinical value of these signs is emphasized by Samuel West in the course of an able article in the April number of *Pacific Medical Journal*. Thickening of the arteries is one of the cardinal signs of the disease, and is especially suspicious in young people, in whom it cannot often be of an athermatous nature. The high tension pulse is well recognized in advanced cases, and is measurable between the pulse waves; the arteries feel both abnormally full and abnormally tense. Low tension and irregular fluctuations in tension are neuro-paralytic phenomena observed at a very late period and are of unfavorable prognosis. The ultimate results of the increased tension, as described by Broadbent, include cardiac failure, general disturbances of health, anemia and a sort of cachexia, and even hemorrhages. The coincidence of "albuminuric retinitis," with high pulse tension and thickened arteries, may serve to justify a diagnosis of granular kidneys before the appearance of casts or albumin in the urine.

Hemochromatosis. Commenting upon a marked non-glycosuric case of this disorder that proved fatal from intercurrent typhoid and exhibited extreme pigmentation of the skin and viscera, with iron, containing an iron-free pigment, Dr. Eugene L.

Opie (*Maryland Medical Journal*, April 1) remarks that the original factor is some obscure blood-destroying cause, that the disposition of the resulting pigment, particularly in the liver and pancreas, leads to intestinal inflammation of these organs, and that the terminal effect of this pancreatic cirrhosis is the "bronzed diabetes" of French writers.

**Hygienic Treatment
of Chronic
Interstitial Nephritis.**

Dr. Edwin F. Wilson (*Columbus Medical Journal*, March 21) prefers the mixed diet of milk and vegetables to milk alone. He cuts off alcohol and gives water freely. The patients are directed to wear woolen underclothing and to avoid exposure in damp and cold weather. A Turkish bath once a week is of much benefit, or the home bath cabinet may be used instead. All mental and bodily fatigue must be avoided, and the patient should live an easy, quiet, regular life.

**Significance
of Vomiting.**

The following differential points are given by Dr. Langford Syms (quoted in *Archives of Pediatrics*): Any undigested food in the stomach may produce vomiting, and free hydrochloric acid is generally absent from the stomach contents, whereas lactic and other organic acids are usually present on account of the fermentation of retention. Reflex vomiting occurs in cerebral disorders and at the onset of eruptive fevers, whooping cough, pneumonia, tonsillitis or intussusception. "The vomiting of indigestion has regular pulse, full abdomen and diarrhea, while that of brain disease has irregular pulse, retracted or scooped-out abdomen and constipation."

**Baths for
Fevers of Children.**

Prof. Samuel S. Adams (*Archives of Pediatrics*, April) claims that just as good results follow the use of a bath having a temperature of 90° to 100° as one much colder, providing a cold cloth is applied mean-

while to the head. The ordinary duration of the bath is ten minutes, and during this time the patient should be subjected to continuous friction. He is much opposed to the internal antipyretics. He emphasizes what we consider an important point when he insists that no matter what the temperature, it should not be treated unless there are cerebral or other manifestations of its ill effects. That diagnosis is frequently obscured by this scotching every fever on sight, is a matter of common observance.

Pain and Jaundice in Diagnosis. The relation of these two symptoms affords a valuable guide in making a diagnosis between gall-stones and cancer of the liver, bile ducts or head of the pancreas, says Prof. Mayo Robson, in *International Medical Annual*. In cancer of the liver, jaundice is often slight and pain is usually absent. In cancer of the head of the pancreas, jaundice is very deep, pain is quite absent and a non-tender tumor of the gall-bladder can usually be felt. In cases of gall-stones in the common duct, there is nearly always a history of previous attacks, with variable jaundice, and the pain is referred to the epigastrium and radiates to the midscapular region—not more to the right than the left unless there are gall-stones also in the gall-bladder; the tender spot is midway between the umbilicus and ensiform cartilage, and the gall-bladder is almost never enlarged.

Kansas City Medical Journalism.—Dr. John Punton, of the *Lancet*, has purchased the *Medical Index*, and will combine both journals under the name of the *Medical Index and Lancet*. Both publications have been good ones, and no doubt will become better ones under the consolidation.

Another Consolidation.—According to the *Medical Review*, The St. Louis Medical College and the Missouri Medical College are about to join hands and form one strong institution.

EDITORIAL ITEMS.

Congestive Headache.—Ringer recommends six drops of tincture of belladonna every three hours.

Lumbago.—Dry cupping over the affected muscles is said often to give instant and permanent relief.

Rigid Os.—The application of cocaine is recommended as very successful in procuring speedy dilatation.

Chilblains.—A 5 per cent. paraffin ointment of chlorinated lime is recommended as a cure for this painful ailment.

Aphthae.—The honey of borax, applied several times daily to the patches, is a pleasant remedy recommended by Ringer.

Nocturnal Epistaxis.—The most common cause of this symptom in children is the presence of adenoid growths in the pharynx.

Fraternal Greetings.—Gov. Johnson, of Missouri, to Gov. Thomas, of Colorado: "Have you used Paine's Celery Compound?"

Medical Bill Vetoed in the Interest of Quacks.—Gov. Thomas, of Colorado, on the 25th day of April, 1899, vetoed the Cannon Medical Bill.

Sore Throat in Rheumatism.—The *Medical Times* asserts that about 75 per cent. of cases of acute articular rheumatism are ushered in by sore throat.

Signed in the Interest of Gamblers.—Gov. Thomas, of Colorado, some time during the month of March, 1899, signed the Prize Fighting and Gamblers Bill.

Rheumatic Pharyngitis.—Sajous prescribes a teaspoonful of ammoniated tincture of guaiac every three hours, to be taken in a half glass of milk, and swallowed.

An Itching Nose.—Persistent and distressing itching of the nose will sometimes be the only indication of lithemia, says John N. Upshur in the *North Carolina Medical Journal*.

Albumosuria in General Paralysis.—Authorities in general agree that a trace or more of "peptone" is usually present in the urine of parietic demented, particularly in acute types.

Senile Vertigo.—Tincture of strophanthus, five drops three or four times daily, is recommended by Wilcox as being highly beneficial in the vertigo of old persons due to anemia.

Tubercular Fever.—Thymol in 4-grain wafers three or four times a day is a valuable, non-depressant remedy. The dose may be increased in frequency until a dram a day is taken.

The Sign of Laseque.—This consists in acute pain, felt when the thigh is flexed upon the pelvis with the leg extended at the knee-joint. It is present in sciatica and is due to stretching of the sciatic nerve.

Epistaxis.—Boyd Carnrick (*Journal American Medical Association*) recommends as very efficient a small finger-shaped tampon cut out of sponge and well washed in hot water. It should not be left in the nasal passages longer than twenty-four hours.

Old Fracture Pain.—Persistent pain over the seat of an old fracture, says *International Journal of Surgery*, is nearly always benefited by the internal use of potassium iodide, along with the external application of iodide or a mercurial ointment.

L. O. A. and R. O. P.—Jewett states that in nearly every case when the back of the child, points to the left side of the mother the position is occipito-left-anterior, and when the back is on the right side of the mother the position is occipito-right-posterior.

Neuralgic Headache.—As a prophylactic in neuralgic headache and in migraine with anemia, Thornton prescribes a combination of 5 minims syrup iodide of iron with 1 minim phosphorated oil and 20 minims cod-liver oil, given in a capsule two hours after meals.

Vomiting in Graves' Disease.—The emesis of exophthalmic goitre is explained by Dr. G. G. Buford (*Atlanta Medical and Surgical Journal*, March) as being due to irritation transmitted to the center in the medulla by way of the recurrent laryngeal and pneumogastric nerves.

Treatment of Gastric Ulcer.—Murrell considers the best medical treatment to consist in the administration of tincture of iodine, 10 drops three times a day in a wineglassful of water, with a half dram of glycerin added if the patient objects to the taste. He asserts that the ulcer will heal completely in a few days and that in the early stages this treatment will often effect a cure without limiting the diet or confining to bed.

Suggestions Wanted.—Opinions of health officers, registrars, sanitarians, pathologists, and physicians generally are desired as to the nature of the changes to be made in the revision of the Bertillon classification of causes of death. A pamphlet containing an account of the system, with full information, will be sent free upon request of Dr. Cressy L. Wilbur, Lansing, Mich., who is Secretary of the U. S. Commission of Revision, working under the auspices of the American Public Health Association.

Superficial Abdominal Pain.—In intestinal obstruction, due to a band or volvulus, it will frequently be found that the site of the lesion is indicated by superficial pain at a corresponding part of the abdominal wall, says Mayo Robson in the *International Medical Annual* for 1899.

The Crying Baby.—Southworth (*Archives of Pediatrics*) calls attention to uric acid infarcts and irritation of the kidneys, ureters, bladder and urethra as a common cause of crying in the new-born infant, and emphasizes the need of boiled water in frequent potions as a preventive of this trouble.

Alcohol as a Hypnotic.—Editor Cottell, of the *American Practitioner and News*, writes of the growing abuse of alcoholics by neurasthenics for the relief of insomnia, and says truly that the same caution should be exercised by the physician in prescribing liquors as in exhibiting other enslaving drugs.

Hyperemesis Gravidarum.—Dr. James Tweddale affirms (*Peoria Medical Journal*, March) that in the past twenty-two years he has never failed to relieve the vomiting of pregnancy by rectal injections of 60 to 90 grains of potassium bromide in thin solution of starch, repeated two or three times daily if need be.

Cardiac Disturbances During Thyroid Treatment.—Bedard and Mabile (quoted in *Medical News*) reasoning from experiments on dogs, suggest the administration of Fowler's solution to control those annoying cardiac symptoms which so frequently interfere with the continuation and success of the thyroid treatment.

Shoulder Dislocations.—A rapid test of subluxations at the shoulder joint, says, *International Journal of Surgery*, is in applying a straight ruler to the acromion process of the scapula and the external condyle of the humerus. If it touches both points at the same time there is dislocation, for in the normal shoulder the deltoid prominence prevents such double contact.

Chronic Coughs.—Sanger (*New York Medical Journal*) recommends fluid extract of hydrastis, in doses of 20 or 30 drops, as the best drug for phthisical cough. A. Goldhammer (*Medical Record*) has found guaiacol of great value in chronic bronchitis. He begins with 5 drops three times a day and gradually increases to 15 drops. The drug is best given in milk or in capsules.

Treatment of Dysentery.—Buchanan reports 102 cases in the *Indiana Medical Gazette*, with only one death under treatment with saturated magnesium sulphate solution, one or two drams every hour or two, according to strength of patient. A low diet was enforced until the stools became solid, and the medication continued for a day or two after the disappearance of mucus and blood.

BOOKS.

A Text-Book on Practical Obstetrics.—By Egbert H. Grandin, M.D., Gynecologist to the Columbus Hospital; Consulting Gynecologist to the French Hospital; late Consulting Obstetrician and Obstetric Surgeon of the New York Maternity Hospital; Fellow of the American Gynecological Society, etc. With the Collaboration of George W. Jarman, M.D., Gynecologist to the Cancer Hospital; Instructor in Gynecology, in the Medical Department of the Columbia University; late Obstetric Surgeon of the New York Maternity Hospital; Fellow of the American Gynecological Society, etc. Second Edition, Revised and Enlarged. Illustrated with 64 Full-Page Photographic Plates and 86 Illustrations in the Text. $6\frac{1}{2} \times 9\frac{1}{2}$. Pages, xiv-461. Extra Cloth, \$4.00 net; Sheep, \$4.75 net. The F. A. Davis Co., Publishers, 1914-16 Cherry St., Philadelphia.

The change of title from that of the first edition is to be commended, since this work is a practical one in the highest degree. As a clinical guide for practitioners and a succinct and comprehensive text-book for students, the book has no superiors and but few equals. The graphic method of teaching adopted by the authors is thoroughly in accord with the most modern methods. In addition to the three parts on pregnancy, labor and the puerperal state, the present edition includes a definite, extensive and up-to-date account of obstetric surgery, in which section asepsis and antisepsis are taught as paramount principles. The authors distinctly favor suprapubic symphysiotomy in proper cases, as also internal rotation of body and head in occipito-posterior positions.

Surgical Nursing.—By Bertha M. Voswinkel, Graduate of Episcopal Hospital, Philadelphia; late Nurse-in-Charge of Children's Hospital, Columbus, Ohio. Second Edition, Revised and Enlarged, with 112 Illustrations. Price, \$1.00. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut St. 1899.

The successful aim of the author has been "to give a concise outline of surgical nursing in general, together with a list of anti-septic agents, the mode of preparations of the various materials used in antiseptic and aseptic surgery, and the application of splints and fixed dressings." The book contains also much useful information on gynecologic nursing, hemorrhage, invalid cookery, and poisons. The marginal headnotes are convenient and aid the memory. The numerous wood cuts familiarize the reader-nurse with instruments, bandages, splints and other mechanical devices pertaining to her cult.

Nervous and Mental Diseases.—By Archibald Church, M.D., Professor of Clinical Neurology and of Mental Diseases and Medical Jurisprudence in the Northwestern University Medical School, Chicago; Professor of Neurology in the Chicago Polyclinic, etc.; and Frederick Peterson, M.D., Clinical Professor of Mental Diseases in the Woman's Medical College, New York. Royal Octavo; 843 pages, with 305 Illustrations. Price, Cloth, \$5.00 net; Half-Morocco, \$6.00 net. Philadelphia: W. B. Saunders, 925 Walnut St. 1899.

The work before us is a carefully prepared, thoroughly scientific digest of modern neurology and psychiatry; the former by Dr. Church, the latter by Dr. Peterson. As far as is practicable, the various subjects are considered from the anatomic basis. The chapters on examination of patients and the sections on localization are particularly praiseworthy for telling much in few words. The illustrations are unusually numerous for a work of this kind, and are mostly original. The volume should serve both as an excellent text-book for students and an authoritative guide for practitioners.

Retinoscopy.—(Or Shadow Test) In the Determination of Refraction at One Meter Distance, with the Plane Mirror.—By James Thorington, M.D., Adjunct Professor of Diseases of the Eye, in the Philadelphia Polyclinic and College for Graduates in Medicine. Third Edition, Revised and Enlarged. Forty-Three Illustrations, Twelve of which are Colored. Price, \$1.00. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. 1899.

We have already had occasion to write in an encomiastic spirit of this brochure, and the fact that it has reached three editions within less than two years shows in what high esteem it is regarded by the medical profession. The great objective test of refraction is herein so elucidated that any physician can comprehend and practice it in the fitting of glasses or the determination of the need of spectacles.

Diseases of the Ear, Nose and Throat, and Their Accessory Cavities.—By Seth Scott Bishop, M.D., D.C.L., LL.D., Professor of Diseases of the Nose, Throat and Ear, in the Illinois Medical College; Professor in the Chicago Post-Graduate Medical School and Hospital; Surgeon to the Post-Graduate Hospital; one of the Editors of *Laryngoscope*, etc. Second Edition, Thoroughly Revised and Enlarged. Illustrated with 94 Chromo-Lithographs and 215 Half-Tone and Photo Engravings. 6½x9½ inches. Pages xix-554. Extra Cloth, \$4.00 net; Sheep or Half-Russia, \$5.00 net. The F. A. Davis Co., Publishers, 1914-16 Cherry St., Philadelphia.

The early exhaustion of the first edition of this eminently practical work has afforded the author an opportunity to round it out more nearly to perfection, within the limits of a convenient

volume. Two new chapters have been added, on "Related Diseases of the Eye and Nose," and "Life Insurance Affected by Diseases of the Ear, Nose and Throat." A number of new articles on autotomy and other subjects have been incorporated in the text, along with many more colored drawings and photogravures. The matter of treatment is discussed with greater fullness, and in the appendix a large number of approved formulae are conveniently grouped. The book is one that pleases while it instructs. It has already proved itself an admirable text-book and guide to practice. The numerous chromo-lithographs constitute a fine atlas of local anatomy and disease pictures. The condensation of otology, rhinology, pharyngology and laryngology into a single volume fulfills every clinical demand, particularly for general practitioners.

International Clinica.—A Quarterly of Clinical Lectures on Medicine, Neurology, Surgery, Gynecology, Obstetrics, Ophthalmology, Laryngology, Pharyngology, Rhinology, Otology and Dermatology, and Specially Prepared Articles on Treatment and Drugs. By Professors and Lecturers in the Leading Medical Colleges of the United States, Germany, Austria, France, Great Britain and Canada. Edited by Judson Daland, M.D., Philadelphia; J. Mitchell Bruce, M.D., F.R.C.P., London; and David W. Finlay, M.D., F.R.C.P., Aberdeen. Volume IV. Eighth Series. 1899. Philadelphia: J. B. Lippincott Co.

The latest volume of this standard publication contains the usual repertory of contributions of every day interest and service to physicians and surgeons, general practitioners and specialists. In a lecture on the treatment of this condition, Mathews states that practically all ulcers of the rectum are cancerous, syphilitic, or tuberculous, and that in twenty years' experience in rectal surgery he has not seen twenty cases of well defined, benign, simple ulceration of the rectum. In the treatment of ordinary hemoptysis, Cecil Y. Biss recommends absolute quiet and rest, the ice-bag to the chest, morphine for the cough, calomel and saline purgation, iodide of potassium to increase the coagulability of the blood, and restriction of liquids. He doubts the efficacy of ergot and so-called internal styptics and inveighs against the practice of sucking ice. In his third lecture on the treatment of tuberculosis, Prof. Grancher speaks at length upon the dyspepsia, so common, as a complication of the phthisical state. He calls special attention to this indigestion as an exciting cause of tachycardia, night sweats, insomnia and vasomotor disorders. W. Hale White contributes an important article on "Alterations of Weight by Diet," referring especially to cases of anorexia nervosa. Menstrual pain is considered by William Stephenson to be due as a rule to variations in vascular tension, and he makes a very plausible argument in favor of this theory. The more frequent diseases of the frontal sinuses are discussed clearly and succinctly by Casey A. Wood.

Progressive Medicine.—A Quarterly Digest of Advances, Discoveries, and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M.D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Volume I., March, 1899. Octavo; 490 pages. Price, \$2.50. Lea Brothers & Co., Philadelphia and New York. 1899.

We welcome the advent of this new series and believe that it will be a genuine factor in the progress of scientific medicine. The purpose of the compilers of this work is to place before medical readers a complete, readily assimilable synopsis of such contemporary medical literature as will be useful to men, carefully excluding all that is useless or misleading. The narrative form which is followed enhances the interest of every contribution. The collaborators comprise twenty-one prominent physicians and instructors, each one of whom culls, sifts and arranges the data in his special field. The typographic presentation is highly attractive, and numerous wood cuts and colored plates embellish the text. A complete index is appended to each volume, and the journal references are indicated at the bottom of each page. The initial volume before us embraces the surgery of the head, neck and chest, by J. Chalmers Da Costa; the diseases of Children, by Alexander D. Blackader; pathology, by Ludvig Hektoen; infectious diseases, by William Sydney Thayer; laryngology and rhinology, by A. Logan Turner; and otology, by Robert L. Randolph. We cannot recommend the work too highly for its intrinsic merits and extraordinary practical utility.

Cyclopaedia of the Diseases of Children.—Medical and Surgical.—The Articles Written Especially for the Work by American, British and Canadian Authors. Vol. V.—Supplement. Edited by William A. Edwards, M.D. Illustrated. Octavo; 1332 pages. Philadelphia: J. B. Lippincott Company.

This volume is a continuation of Keating's *Pediatric Cyclopaedia*, published ten years ago. It embraces all the many advances made in this young and growing field of medicine and surgery during the past decade, comprising ninety-four distinct and original articles by as many contemporary authorities, including a contribution by the late lamented Pepper. The present editor, Dr. Edwards, was associated with Dr. Keating in the preparation of the great pioneer cyclopedia, which bears the latter's name, and has made this supplemental volume conform in all important particulars to a single plan. Among so many contributions of practical value it is impracticable even to mention the salient features of each, and for that matter the work is truly an encyclopedic one, intended chiefly for reference. Personally we have taken special interest in the highly scientific article on toxins and antitoxins by Vaughan, in the

extremely important chapter on feeding in infancy and early childhood by Rotch, and in the very practical resume of advances in therapeutics by Hare. The contributions on swimming, dancing and bicycling, the hygiene of the eye in childhood, the mortality of early life, and Francis Warner's scientific study of the mental and physical conditions of childhood, based upon the examination of 100,000 children, speak well of the prophylactic tendencies of the times. We note that glandular fever receives recognition as a distinct infection. The text is illustrated with 104 plates, some in colors, and 49 figures. Medical men who have the other four volumes will undoubtedly desire this one to complete their sets to date, but those who do not possess the former volumes will find this supplement practically sufficient, as nearly every subject is discussed herein and from the latest standpoint.

The Pathology and Treatment of Sexual Impotence.—By Victor G. Vecki, M.D. From the Author's Second German Edition, Revised and Rewritten. Price, \$2 net. Philadelphia: W. B. Saunders, 925 Walnut Street. 1899.

The author of this volume has furnished the profession with a very thorough and readable discussion of a very important subject in all its bearings. He takes a rational view of the whole matter, and does not mingle theology with his medicine. His style of presentation is easy, graceful and polished. The chapter on treatment is especially full and instructive. The possession and study of this book cannot fail to widen any physician's sphere of usefulness.

The International Medical Annual and Practitioner's Index.—A Work of Reference for Medical Practitioners. 1899. Seventeenth Year. E. B. Treat & Co., 241-243 West 23d Street, New York: 199 Clark Street, Chicago. Price, \$3.00.

The seventeenth volume of the annual compares favorably with any of its predecessors. Thirty-two British and American contributors have fully covered the past year's progress in medicine and surgery. The arrangement of the contents is the same as heretofore. The first part, on new remedies and therapeutic progress, is well handled by Wm. Murrell. R. Norris Wolfenden contributes a chapter on "Practical X-Ray Work." A. D. Rockwell writes of recent advances in electro-therapeutics. Part II. on new treatment (including much about symptomatology and diagnosis) takes up 474 of the 758 pages of the book. Samuel G. Shattock publishes the second part of his "Atlas of the Bacteria Pathogenic in the Human Subject," including many beautiful plates, with descriptions and practical directions. The notes of American legal decisions affecting medical practitioners and the public health, sanitary science and books of the year, make up the concluding chapters.

The Medical News Pocket Formulary for 1899.—By E. Quin Thornton, M.D., Demonstrator of Therapeutics, Pharmacy and Materia Medica in the Jefferson Medical College, Philadelphia. Lea Brothers & Co., Philadelphia and New York. 1899.

The best of doctors will sometimes be at a loss as to what is best to prescribe in a given case. This neat little pocket volume is designed to help them out in just such crises. The prescriptions for the various diseases and symptoms are modern and practicable, and each formula is designated for certain specific indications. The amount of each drug is stated in both the English and the metric systems. The book also contains tables of weights and measures, thermometry, important incompatibles, poisons and antidotes and of doses. *Multum in parvo* seems to have been the author's motto when compiling this epitome of treatment.

The Physician's Perfect Call-Book and Record.—By Dr. G. Archie Stockwell, F.Z.S. Thirty-two patients per page. Thirteenth Edition. Price, \$1.50. Published by William M. Warren, Detroit, Mich. Mailed, prepaid on receipt of price, or to be had through book-sellers. (Prowitt Pharmacy.)

This handy pocket volume contains, in addition to the complete visiting record, correct tables of doses, axioms of posology, many useful points on diagnosis and prescription writing and on diet, poisons and antidotes, artificial respiration, etc. In the blank portion of the pages there are also an obstetric record, death record, vaccination record and spaces for memoranda, and bills and accounts. The latter may be kept on one double page, and in other respects the book is exceedingly convenient.

Saunders' Pocket Medical Formulary.—By William M. Powell, M.D., Author of "Essentials of Diseases of Children," etc. Fifth Edition, Thoroughly Revised. Price, \$1.75 net. Philadelphia: W. B. Saunders. 1899.

The test of use has proved the every day worth of this tasteful and compact pocket companion. The formulas number more than 1,700, including favorite prescriptions of the leading physicians of the past and present, together with many recipes of tried value in hospitals. Blank pages are conveniently interspersed for additional formulae to be selected by the owner of the book. The appendix contains a posological table, formulae and doses for hypodermic medication, poisons and their antidotes, diameters of the female pelvis and fetal head, and obstetric table, diet list for various diseases, materials and drugs used in antiseptic surgery, treatment of asphyxia from drowning, a surgical remembrancer, tables of incompatibles, eruptive fevers, weights and measures, etc. A thumb index makes reference easy.

An Essay on the Nature and Consequences of Anomalies of Refraction.—By F. C. Donders, M.D., late Professor of Physiology and Ophthalmology in the University of Utrecht. Revised and Edited by Charles A. Oliver, A.M., M.D., Philadelphia. With Portrait and Other Illustrations. Price, \$1.25. Philadelphia: P. Blakiston's Son and Co., 1012 Walnut Street. 1899.

The publishers of this unique brochure have paid a tasteful tribute to a great man and at the same time done a real service to ophthalmology in thus presenting to the English speaking world the aphorisms of the pioneer master of dioptrics. Every ophthalmologist ought to avail himself of this fundamental exposition of the chief part of his specialty.

Gerrish's Anatomy by American Authors.—Gerrish's forthcoming ANATOMY BY AMERICAN AUTHORS promises to be the work for which teachers and students have long been looking. Its editor, Prof. F. H. Gerrish, of Portland, has selected as his fellow-contributors leading anatomists throughout the country, wisely restricting their number to accord with the best division of the subject, gaining thereby unity in result, joined with the highest authority. The list includes Professors Bevan of Rush in Chicago, Keiller of the University of Texas, McMurrich of the University of Michigan, Stewart of the University-Bellevue College in New York, Wollsey of Cornell Medical College in New York, and Gerrish himself, who is not only editor, but perhaps the largest contributor. The plan of the work judiciously avoids the unimportant and exceptional, reserving its space for those portions of anatomical knowledge which are necessary to the intelligent study of physiology, surgery and internal medicine. The authors have endeavored to stand in the place of a living teacher to the student, selecting such portions as will be of actual service to the pupil in his study and to the practitioner in his subsequent clinical work, clarifying obscurities, giving most help in the most difficult parts, and illustrating everything by all available methods. Pictorially GERRISH'S ANATOMY will be by far the most lavish work ever offered on a subject which can already boast of many elaborately illustrated text-books. The engravings number about one thousand, their size is large enough to make visible every detail, colors have been employed more liberally than ever before, and lastly the labels of the parts have been conspicuously engraved upon them, whereby a glance gives not only their names but also their position, extent and relations, obviating entirely the slow, toilsome and wasteful mental processes necessitated where only reference letters are employed. In an early issue we shall give our readers a review of the book itself.

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Don E. Ashley, M.D., Guy's Mills, Pa., says: "After the mania produced by improper use of alcoholic beverages has been controlled, I know of no better compound than Celerina to restore tone to the nervous system and vigor to the whole human economy. I find it an excellent remedy for colliquative sweats, especially in convalescent cases of typhoid fever. I speak not from the experiences of other physicians, not from hearsay, but from knowledge obtained from the careful observance of happy results brought about by the administration of this useful medicine."

A Card.—Dr. H. L. Campbell, Watauga, Tenn., writes: "I received the sample of Blennostasine you so kindly sent me. I was suffering from an extremely severe "coryza" and took a pill once every hour until three had been taken. The cold disappeared as if by magic. I have prescribed it in two or three other cases of acute colds, with invariable relief."

Chicago Polyclinic.—Chicago is rapidly coming to the front as the medical center of the new world. Nowhere in the United States can be found better clinical advantages than in this windy city. The Chicago Polyclinic is the equal of any in this country. A glance over the names composing the faculty will satisfy any one on this point. The practical courses given in surgery, gynecology, skin and venereal diseases is a special feature of the college work this summer.

Pruritus Ani.—A. J. Baker Flint, M.D., 102 Huntington Ave., Back Bay, Boston, writes of a case: "I want to, in the interest of humanity, ask you to lay special stress upon the value of Unguentine in pruritus ani. I personally have been tortured with it for seven or eight years and never have found anything to act only as a palliative until I used your preparation, which has absolutely cured me, and now my faith in it is such that I prescribe it for everything in which there is inflammation or where it is necessary."

One of the Oldest Antiseptics.—There are thousands of physicians; yes, tens of thousands, we doubt not, who can say with "Doctor," in "An Interview, "Why, I absolutely depend upon Listerine in most of my throat work, and find it of inestimable value in my typhoid cases (as many a poor soldier boy can testify), and there are a number of purposes I put it to in the sick room, where nothing can take its place, notably, as a douche, mouth-wash, and in sponging my fever patients. Furthermore, I always deem it my duty to see that patients get exactly what I order for them, therefore I always order an original package, thus avoiding all substitutes. That is just where my views upon professional attitude and sound business policy consolidate into one joint effort for the patient's benefit, and, incidentally, my own." Like every other good thing, Listerine has been counterfeited, as many a physician has found to his regret, none of the "just as good and cheaper" preparations approaching it for trustworthy antiseptic service.—*Mass. Medical Journal*.

Rectal Alimentation.—Dr. L. H. Watson, of Chicago, Ill., in a most interesting article on this subject, in the *New England Medical Monthly*, of February, 1899, states that while rectal feeding is a makeshift, it is, according to our present light, at least a valuable one, life being prolonged in many cases. With regard to the different nutritive substances adapted for this purpose, he especially calls attention to Somatose, which he considers very useful as an enema on account of its richness in albumen, four times as much as meat. He states that an enema of Somatose in salt water relieves the feeling of hunger and faintness at the stomach. Ferro-Somatose, which is practically a proteid iron preparation, can also be employed in cases of anemia and chlorosis when ulcer is suspected. Although the first thought of the patient and friends, when told that it is impossible to feed by the stomach, is that death is inevitable, he regains his peace of mind when assured that he can be fed with nutritive enemata, and this affords the physician time for reflection.

An Emulsion.—Dunglison's Medical Dictionary defines Emulsions as follows: "Pharmaceutical preparations of a milky-white opaque appearance composed of oil divided and held in suspension in water by means of mucilage." Worcester says: "A medicinal preparation of milky appearance, composed of a fixed oil divided and held suspended in water by means of mucilage." There seems to be a very general agreement that mucilage is the essential part of oil emulsions. When the physician prescribes an emulsion of fat, he attempts to present fat to the absorbing vessels of the bowels ready for immediate absorption. Gum Arabic and Gum Tragacanth (the latter is generally used, and which is insoluble in water), are not foods. But when emulsions are prescribed, you are compelled to give not less than 50 per cent. of these substances, which are known to be inert and which increase the difficulties of absorption. In an emulsion each oil globule receives an envelope or coating of gum, consequently the digestive fluids are not only compelled to break up the globules anew, but are first compelled, in order to reach the oil, to dissolve the envelope of gum. Hagee's Cordial Cod-Liver Oil Comp. is not an emulsion, but an elegantly aromatized cordial, containing all the active principles of Cod-Liver Oil taken from Cod-Liver Oil, without the grease.



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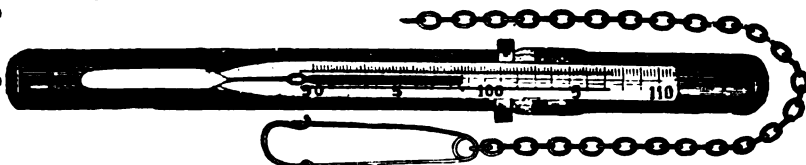
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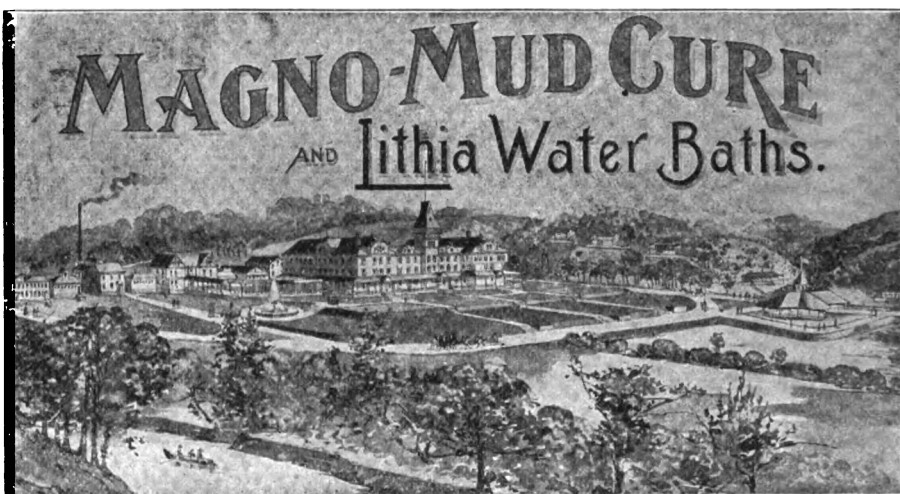
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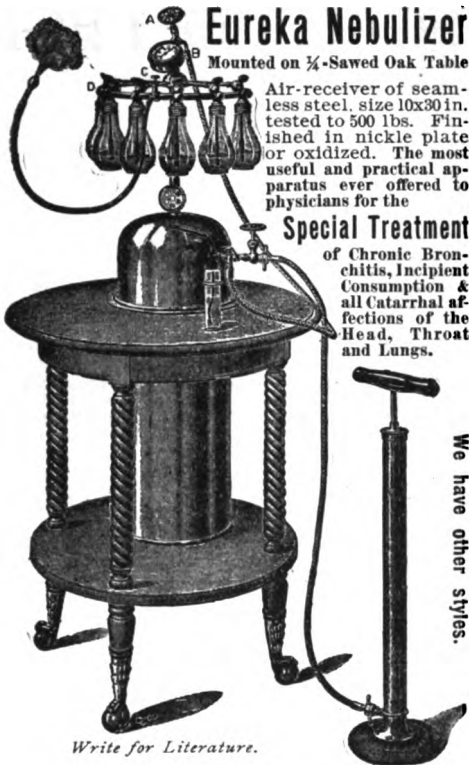
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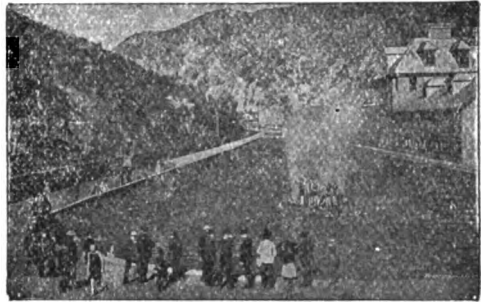
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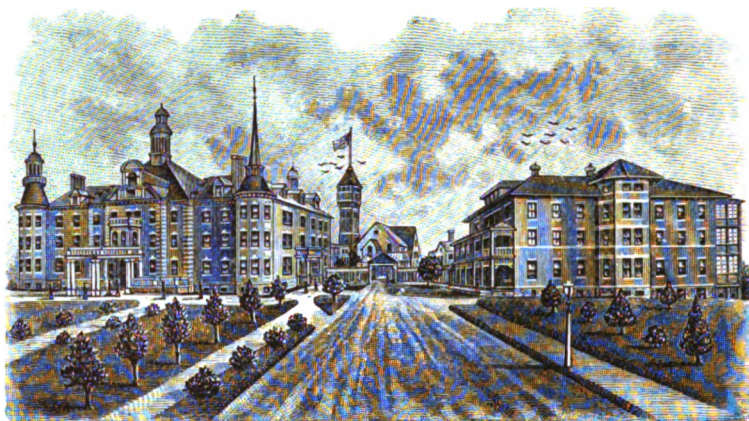
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DENVER MEDICAL TIMES

VOLUME XVIII.

JUNE, 1899.

NUMBER 12.

ORIGINAL COMMUNICATIONS.

AN ADDRESS

Delivered at the Graduating Exercises of the Gross Medical College,
in Denver, April 25, 1899,

By the HON. A. B. SEAMAN,
Denver, Colorado.

• Most of us, who live among the mountains, never climb a peak. One of our principal industries is mining and smelting. We pass our lives in sight of a smelter, and have no idea of the process by which the value is separated from the dross. We ride on an electric car and have no conception of the means by which the power is applied to make the car move. Bicycles are common, and most of us are without a knowledge of the name of the natural forces which assist in keeping the wheel erect—all illustrating that frequently we know the least of those things which are commonest; that we inquire but little of matters concerning which we can learn at any time; that we think we know the familiar things about us, when, as a matter of fact, we in reality have no information concerning them, except their existence. There are but few within the sound of my voice who would not be vastly entertained by a lecture upon the fly, delivered by some one who knew something about a fly.

It is the thought suggested by these things that induces what I shall say to-night with reference to the medical profession, or, perhaps, more accurately speaking, with reference to the regular practitioners of medicine.

The history of medicine is as old as the history of civilization. As far back as we are able to learn anything of ancient people, we know they had among them individuals and classes who were believed to have some powers or some knowledge which enabled them to benefit others suffering from bodily infirmities. The fact remains, that even among educated people—so-called—but few, aside from doctors themselves, have ever given any at-

tention to the history of medicine. I much doubt whether there is a subject concerning which people know so little, where the means of information are so plentiful.

All of us have among our personal friends and acquaintances doctors, and yet but few have ever given enough attention to medical ethics to enable them to have the slightest conception of the nobility of the profession.

What I shall say to-night ought to be the commonest information among doctors, and known by every layman, and yet I am led to believe that there are even doctors who are not as well acquainted with some of the facts as they should be, and I am satisfied that but few laymen know the simplest things with reference to medical ethics.

It is, perhaps, not improper for me to say that the subject has been suggested by the recent discussion which has taken place in the newspapers and in the legislature, with reference to a medical bill which was before the General Assembly for consideration, and finally passed. All four of the daily newspapers in this city saw fit to publish editorials with reference to this bill, assailing it, its author, and the doctors who urged its passage. Newspapers are popularly supposed to be edited by men of education. There are those who still cling to the idea that they are sometimes published by honorable men. With reference to these ideas I have long been a skeptic, and my observation with reference to the editorials upon this subject made me still more cynical. I have probably given more attention to this matter than most laymen, and I know that the newspaper editorials in opposition to this bill were either written by knaves or fools, or possibly those having a combination of both. Never have I heard a learned and honorable profession so basely and maliciously maligned without reason, as has been the case in the discussion of this legislation. Persons opposed to the bill, for no other motive except selfishness, have not hesitated to misstate the facts upon which they based a pretended argument, nor charge the medical profession with motives as low and contemptible as their own.

It is not my purpose at this time to advocate a medical bill; but the simple thoughts which I shall present have been suggested by the discussion of that bill, and my remarks are made with the hope that some of those within the sound of my voice may learn of some things with reference to the regular practitioner of medicine not generally known, and that they, at least, in the future, will be better prepared to not let pass without contradiction mean and unjustified statements with reference to such matters.

With reference to medical ethics and doctors, I refer to the ethics maintained by and to such doctors as are properly known as regular practitioners of medicine and surgery.

Let me here remark—our editors to the contrary notwithstanding—that no well educated person will apply the term “allopath” to a regular practitioner of medicine. There are no allopathic practitioners of medicine; the term was applied as one of derision by the opponents of the regular school, who saw fit to term themselves another kind of a “path” and who thought to build themselves up by tearing others down. There has never at any time been any necessity for any person to separate himself from the regular profession on account of any peculiarity of doctrine; whenever any person or set of persons have made such a division, it has not been because of necessity, but because those who did it thought they could better serve their purposes, and obtain a greater amount of practice, by so doing. A doctor of medicine is a person who applies medicines for the cure of disease. Regular practitioners have in silence permitted those who were seeking to deride and tear them down, to call them allopaths, to such an extent that now the average person thinks that there is something in their education and in their methods which requires them to give as large a dose of physic as a human being is capable of taking without producing disastrous results. A regular practitioner of medicine should never permit the term allopath to be applied to him without a challenge, and without informing the person so applying it that it was not proper and was offensive.

There is nothing in the education of a doctor which limits him in the size of a dose of medicine to be prescribed. He may give as much or little, or nothing, as he deems best for his patient. If it was in his power to obtain it, he might give as infinitesimal a dose as was ever dreamed of by Hahnemann, or as large a dose as he sees fit. There is nothing which precludes him from using any remedy on earth which he believes would aid his patient. Mesmerism, hypnotism, Christian science, divine science, and many other things, have their advocates; but let it be understood that so far as a regular practitioner is concerned, he may take from any one of these, or any others, anything which he believes would be of benefit to his patients, and he has a perfect right to prescribe it. He is bound by no theory; he is hedged about by nothing, which prevents him from using any remedy upon the face of the earth which may, in his judgment, be beneficial; and it may be said here that the truth is, that the medical profession, in its onward march, has taken out of every ism and every theory that which it regarded as beneficial, and appropri-

ated it to its own use, and made it a part of itself, and that which has been discarded has been that which was worthless.

The history of medicine, even to the layman, unquestionably offers many features of interest. To the historian it is absolutely indispensable, because the history of the civilization of this world could not be written without writing the history of its doctors. It is a requisite for the statesman and jurist. Medicine and surgery enter in as important factors in the trial of many pieces of litigation, and we must all concede that the most important legislation must be that which deals with public health. The law maker is dealing with a comparatively trivial topic when he makes a law with reference to property interests, as compared to that with which he has to do when he makes laws for the protection of the health of the people. It sounds well to say that a man ought not to be deprived of the privilege of selecting his own doctor; that this would be trespassing upon his personal liberty; that a man ought to be permitted to employ for himself any school of medicine or any person holding himself out to the world as possessing some power of healing, and yet, in my opinion, these things are not true. There seems to have been no limit to the success of either quack doctors or more blantant impostors who set themselves above all doctors. It was Barnum, I believe, who said that the people liked to be humbugged. If he had been called upon to support his proposition, he might have found his strongest illustration by citing what people do in the employment of quack doctors and other impostors who claim power sometimes supernatural to heal disease. It is to be apprehended that no parent would suffer his child to die for the lack of proper medical attention, because that child had a notion it ought not to take any medicine, or that medicine was harmful to it; yet most men in sickness are as children.

Up to this time, at least, education has not rendered the great mass of the public free from gullibility.

There seems never to have been a nostrum concocted, or a theory based upon a superhuman idea, which it was claimed was beneficial and would cure the ills of mankind, so utterly absurd that it did not find its followers among the best citizens of a community. Only a short time ago, in this very city, a few gamblers employed a Chinese laundryman, dressed him in oriental costume, hired an office, secured a kettle, a fire, some water and a few harmless herbs and advertised the celebrated Chinese doctor, Gun Wa. His office was crowded, he examined each patient as he appeared, mumbled an unintelligible something, sold him a bottle of his concoction, without reference to his ailment, and sent his patients on their way rejoicing. It is related that

during the time this emporium of healing was being conducted one or two of the laundrymen thought that they were not receiving a fair division of the spoils, and went on a strike; but this did not interfere with its success. All the promoters of the enterprise did was to turn out one laundryman and bring in another. The Chinese method of dress, loose fitting clothes, was such that it did not even require the making or purchase of a new paraphernalia. And yet, absurd as this all is, if you will go back and read the newspapers which were glad to publish the advertisements of this celebrity, you will find the testimonials of as good citizens, and of those claiming as high a degree of intelligence, as were ever in this community.

Do you suppose that quacks would advertise in the newspapers to-day the powers of the seventh daughter of the seventh daughter, if they did not reap their rewards? We have hundreds in our midst who are now ready to testify to the powers and virtues of Schlatter, and who would regard it as sacrilege if it were suggested that he was a fake, and in the employ of the street car railroads for the purpose of increasing their harvest of nickels at the expense of a credulous people.

It is assumed, sometimes, that the world has advanced much more rapidly than it has. We have among us many to whom a horseshoe is an omen of good luck; who will turn pale if salt is spilled, and those which nothing on earth could induce to sit down to a dinner with the number thirteen at the table. Whether this is a marked advance over those times when the air was supposed to be filled with invisible spirits, good and evil, and men adopted the notion that disease was a possession by devils, may be a matter of much doubt. If I should call upon those in this audience carrying a horsechestnut in their pockets as a guard against rheumatism, I would be much surprised if several would not be seriously embarrassed.

In view of these things, what say you to the proposition that every man ought to have the privilege of selecting his own doctor?

I made some remarks disparaging to the newspapers in opening, and it is not improper that I should say here why I stated what I did. It is a well known fact that after Gun Wa was known to be a fraud, the newspapers of this city continued to publish his advertisements, including his testimonials, and never uttered, editorially or otherwise, a solitary word to warn the people from the fraud, and it was not until a public prosecution had been commenced and they were practically driven to adopt the course, that they ever uttered one word of condemnation. Why? Because they were filling their coffers with the dollars

that came from his advertisements; and why is it that the newspapers within the last month have been writing their editorials sounding the praises of specialists, and saying to the medical profession of this city that they ought to devote the same amount of learning and obtain the same degree of skill that some of these specialists possess, and if they did that then they would not be opposed to advertising their powers. The reason we have the opposition of the newspapers to the advanced progress in medical legislation in this state is because the newspapers reap the harvest from the advertisements of the quacks and charlatans who are here permitted to practice. A crying shame, but nevertheless a fact.

It is almost impossible of conception that a people will submit to these things, but go home, to-morrow morning, when you get your papers, look them over and see the columns of advertisements of these "specialists," whom the newspapers have seen fit to dub learned; look them over and see whether or not you desire to have your children read the stuff that is there printed. As a matter of fact, it ought to be put out on the grounds of its being obscene and detrimental to public morals.

Whenever a man tells you that he can absolutely and unqualifiedly cure a certain disease, and that he will make you well, if you are suffering from that disease, put him down as a quack and a charlatan. I care not whether he be sailing under the title of a Chinese healer, or under the honored name of a regular practitioner of medicine. The scientific physician, who has learned by much study the littleness of human knowledge, has learned that he can promise but little. He knows that men have had their brains strewn upon the streets as the result of a blow, and have recovered, and that men have died from what appeared to be the insignificant scratch of a pin. He knows that he has been called to wait upon persons suffering with what appeared to be but a trivial complaint, and that inside of twenty-four hours he was called upon to write their death certificate. That, on the other hand, he has seen people so sick, and as it seemed to him, so near death that no human agency would avail, and that same person has recovered and is now in apparent good health.

The result of this is, the learned and honorable physician promises but little, and, in fact, nothing. He may tell you that in his opinion your ailment is slight, but he never guarantees a cure, and the surest way to tell a charlatan is in the way I have indicated. The impudent pretender to science of which he knows not even its language, promises everything, and if nature performs something, he claims and usually gets the credit for it.

We really have little appreciation of how credulous we are. We exercise less logic with reference to sickness and its cure than almost anything else with which we have to deal. The average person is afflicted with pain. Some one suggests a pill. He takes the pill, the pain leaves him, and he says the pill cured the pain. A man who thinks never says that; he says that he had a pain; he took a pill; he was relieved of the pain; whether the pill did it or not, he does not know.

We rarely have any hesitancy in prescribing for others. Most of us are able diagnosticians, and have no hesitancy in prescribing remedies. We had some ailment at some time, took something and got well. We see a friend of ours and he is apparently afflicted in the same way. We have no hesitancy in arriving at the conclusion that he has the same difficulty we had, and we therefore prescribe the same remedy.

This seems simple and absurd, but it is a fact with which we are all familiar. I should have no hesitancy in saying that unless a man has such a constitution that nothing would kill him, if he had a severe cold and would go about among his friends, and, in the course of conversation, as they always will, he is asked what is the matter with him, and he tells them, and they prescribe, as they always will, and he would do this for thirty-six hours, and take every prescription which was given, he would die.

Whenever a layman undertakes to prescribe a medicine, and he thinks his patient will take his prescription, he ought to prescribe asses' milk, and whenever the patient receives the prescription, he ought to send back the word given to Dr. Wolcott by Dr. Geach. Dr. Wolcott had a bad cough; his friend, Dr. Geach, recommended asses' milk, and Dr. Wolcott, upon receiving the recommendation, sent back the following epigram:

"And, Doctor, do you really think
That asses' milk I ought to drink?
'Twould quite remove my cough, you say,
And drive my old complaint away.
It cured yourself—I grant it true,
But then, 'twas mother's milk to you."

The medical profession has the highest aim of any learned profession dealing with temporal affairs. Its ambition is to add to the comfort and duration of human life. It is the most entirely philanthropic of any profession, except, possibly, the ministry, and yet people have no hesitancy in charging a doctor who for the protection of the people, and incidentally his professional standing, desires to see good medical legislation, with being actuated by supremely selfish motives. A more unjust, unkind and less deserved criticism was never made. I undertake to say that

there is no class of people, professional or otherwise, dealing with human affairs, which unhesitatingly and graciously gives so much to humanity as the medical profession.

Medical ethics are assumed to be a system of ethics for the benefit of the medical profession. This is an utter mistake; medical ethics are of much more interest to laymen than they are to physicians. Medical ethics for the most part deal with the duties which physicians owe to their patients and mankind, and with the corresponding obligations which patients and mankind owe to physicians. Except that it would degrade the profession, from every selfish standpoint, medical ethics could be wiped out of existence without injury to physicians. From a financial standpoint, it would be of immeasurable advantage to them, yet mankind would suffer to a degree little realized. There are but few, and, I might say, none, of the principles which enter into medical ethics which do not result for the direct benefit of the people. Most of us little realize what it would mean if professional ethics were abolished.

It is worthy of note that the basis of the American Code of Medical Ethics was prepared by Dr. Thomas Percival, an English physician, for his son, who was about to engage in the practice of medicine. It was the advice of the father to the son, and, as he said, prepared "with the tenderest impulse of paternal love, and not a single moral rule was framed without a secret view to his designation, and an anxious wish that it might influence his future conduct." Springing from such a source, there is not apt to be much but good in it. Among the first provisions of the code of medical ethics is that which requires secrecy on the part of the physician with reference to all that he learns in a professional way concerning the patient.

The physician becomes acquainted with the private character of his patients; he knows their weaknesses, their faults, their vices; he learns their family secrets—all of which he is prohibited from in any way exposing, by the very fundamental ethical principles of his profession. Do you ever stop to consider how closely your family physician was allied to you? How it frequently happens that he holds your very welfare in the hollow of his hand? How many have imparted to him that information which, if made public, or even told to the members of their own families, would bring upon them degradation and dishonor? How often did you ever hear of the violation of this trust by a regular practitioner of medicine? I undertake to say there is not a person within the sound of my voice who ever knew of a regular physician betraying such a confidence and such a trust. Do we realize what a tribute that is to the profession? Do you know

that that gives the profession as high a standard as can be made by humanity? There is no profession from the members of which greater purity of character and a higher standard of moral excellence are required than the medical.

While I am speaking of this as one of the fundamental principles of medical ethics, let me drop from a very high thought to suggest a matter of common politeness, which is this: Never ask a doctor, or, for that matter, anyone else, what is the matter with a person. People are very frequently afflicted with diseases which are not regarded as mentionable in polite society, and with others which would cause embarrassment if known. Do not be so impolite as to ask a doctor a question which would involve a breach of professional ethics to answer, and which, if he did answer truthfully, might cause you embarrassment.

It is the duty of every physician to do all in his power for the promotion of medical knowledge. That abstract statement does not convey to us but a small portion of its meaning. I must illustrate it: A surgeon may devote his entire life to his profession and with the acquisition of skill and knowledge may find the method of making a surgical instrument better than others for use in certain connections. In other words, he may invent a valuable surgical instrument. A physician by study and experience may find a medicine which seems to be of great benefit under certain conditions, which we might perhaps, for this purpose at least, term a cure for a certain disease. Whatever is the invention of the surgeon or the discovery of the physician becomes at once the property of his profession, and the regular practitioner of medicine and surgery who obtained a patent upon a surgical instrument or sought by law to protect himself in a medical discovery, or even claiming it as a secret, would be driven out of any reputable medical society of which he might be a member. The little expression that it is his duty to promote medical knowledge means that he may expend the labors of his life in a given direction, and if successful the results of those labors are the property of his profession, and, indirectly, are the property of all mankind. The man who subscribes to this provision of his ethics certainly cannot be deemed a very selfish man. It cannot be said that he labors wholly for money, or that the ambition of his life is for himself. It is the duty of the regular practitioner of medicine to do all in his power to prevent disease, and for the protection of the public health.

The celebrated Dr. Jenner, who is sometimes spoken of as the discoverer of vaccination, although this statement is not technically true—he should be more properly stated to be the one who was the means of bringing vaccination to public attention

and into general notice—has probably done as much as any one man for the benefit of mankind. He has been the means of preventing the spread of disease, and has done much for the protection of the public health. Vaccination now is in almost every civilized community a requirement of law, yet whatever Dr. Jenner did in this direction was done absolutely and entirely for the benefit of mankind. In his day medical ethics were in their infancy, yet let us pause to consider what it would have meant for mankind if he had been permitted by his professional honor to keep secret that which he knew so well?

Morton occupies substantially the same place with reference to ether as an anaesthetic. Lister is regarded as the father of antiseptic surgery. The principal reward of these men, as of all other medical men, is the consciousness that they have been of benefit to mankind. Look at the safeguards thrown around the public in every city at this time. Who are the persons who have pointed out the manner in which diseases spread, the conditions conducive to contagion, the best means of prevention? Doctors. Do you ever hear of a municipality paying a dollar to a physician as a reward for a beneficial suggestion as to the manner to preserve public health, beyond his ordinary compensation as health commissioner, or some officer of that kind? We do not always realize that there are in the world hundreds and thousands of institutions, charitable in their nature, for the housing and caring for people afflicted with deformities and disease. We have many of them in our own city, and to these doctors give their time and their labor for the most part gratuitously. But few are ever paid any compensation, and, when anything is paid, it is most moderate.

There are a few of the requirements of medical ethics, practically every one of which requires the practitioner to give his best efforts without compensation, to all mankind; and yet it is charged that a class of men who made for themselves these obligations would seek, for their own personal, petty, pecuniary gain, to prevent reputable and equally skillful men from practicing medicine. If the man who seeks to practice medicine is equally reputable and equally skillful, he need have no fear of any law which would be suggested by the regular medical profession.

Medical ethics prohibit advertising by physicians. I have heard many people wonder why this is so. There are many reasons for it: First, it is derogatory to the dignity of the profession; second, it is resorted to by quacks, and therefore ought to be avoided. But at least in one sense, better than all, is the reason that the regular practitioner of medicine has nothing for sale which would attract the class of gullible and credulous people caught by empirics.

A learned medical man is exceedingly modest; his experience and education teach him the inadequacy of medical knowledge; he knows that he can promise but very little, and therefore he realizes that he would be a fraud if he assumed in all instances to cure any disease.

If truly scientific practitioners of medicine were selfish, they would throw down the bars to every human being who desired to dispense drugs. One of the greatest boons ever received by the legal profession was the publication of a book entitled, "Every Man His Own Lawyer." The same would be true of medical men. If doctors wanted to make money, they would favor every quack on earth practicing. The patient of Dr. Jenner had it right. Dr. Jenner sent with a present a couple of ducks to a patient the following epigram:

"I have dispatched, my dear Madam, this scrap of a letter
To say that Miss _____ is very much better;
A regular doctor no longer she lacks,
And therefore I've sent her a couple of quacks."

The patient returned this answer:

"Yes, 'twas politic, truly, my good friend,
Thus a couple of quacks to your patient to send;
Since there's nothing so likely as quacks (it is plain)
To make work for a regular doctor again."

The history of every epidemic of magnitude which has occurred in ancient or modern times is always accompanied with the story of the bravery and self sacrifice of the medical men there present.

These things I say to rebut the charge that doctors are selfish. If it were my province to address the graduating class here to-night, I could but say this: Your profession is the most noble, the most elevating of any dealing with temporal affairs; it requires of you the highest morality, the greatest study, and the largest self sacrifice. If you follow the ethics of your profession, you are as surely bound to attain a high position and standing in the community in which you live as the sun is to rise. If you do not, you will brand yourself as a charlatan and a quack. As you enter upon it you must realize that your life's work is to be devoted for the benefit of the people, and when it is all done the greatest reward you will attain is to have that consciousness of which Tacitus has spoken in his biography of Agricola. "The consciousness of a life well lived, and the record of deeds well done, is most pleasing." While you live, in many instances you will be the subject of jeers and criticism; your patients will be continually telling you that your medicines are no good, and yet, when you are gone, and the last obsequies are said over your prostrate form, if it is given to us to realize beyond death what

is transpiring, and we can derive consolation therefrom, you will know that over your bier will be shed the tears of many men and women; that among the mourners there will be Jew and Gentile; there will be Catholic and Protestant; there will be black and white; there will be those of different political opinions; there will be the old whom you have assisted in the time of their travail; there will be the young with whom you were present when they came into the world. In short, there will be all classes and conditions of mankind, and they will be each shedding an honest tear, as they realize the fact that their benefactor and the benefactor of mankind has passed away.

PUERPERAL SEPSIS, IS IT ALWAYS PREVENTABLE?*

By A. H. GARNETT, M.D.,

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Mr. President and Gentlemen of the Society: Apropos to the discussion going on in the medical press as to the prevention of puerperal sepsis, and the radical position taken by some, that its occurrence should be regarded in the light of criminal negligence on the part of the attending physician, I purpose this evening to briefly take up the subject in opposition to the more pronounced position in support of its prevention under any and all circumstances, dealing with the subject as far as I am able from a purely practical standpoint. It will be remembered by some of you, that several years ago in the early craze, I may say, of antisepsis, I read a paper before this body, titled "Puerperal Fever—Are Antiseptics a Positive Prophylaxis?" My position then was that the method was not only not a certain prophylaxis, but that the extreme to which the treatment was carried was one of questionable propriety, and if carried out in all its details, to my mind, hurtful; and although my views as to the etiology of the disease have undergone some modification since then, I am still not prepared to-night to depart wholly from the position then assumed as to the antiseptic methods of treatment. Now, let us glance for a moment at the generally accepted tenets of faith as held and practiced to-day regarding the cause and treatment of puerperal sepsis. 1. Puerperal fever, so called, is not a specific disease peculiar to women in the lying in condition, but is allied to and identically similar to any other of the septicemic or pyemic con-

* Read before the El Paso Medical Society.

ditions which arise more commonly in connection with surgical affections. 2. The disease is not in any sense a specific, but due to the activity of the lower forms of life included under the general head of micro-organisms, which, when introduced into the body under favorable conditions, develop symptoms to be classed under the head we are now considering. 3. That the normal course of parturition being to recovery, any variation from this tendency must be ascribed to the introduction of some disturbing influence from without. 4. That if the morbid principle be kept out of the body, no disturbing action will occur; finally, that the channel of entrance is most generally through the genital tract and that the carrying agent is unquestionably, very commonly the infected hands of the attendant or instruments introduced of necessity into the vagina or uterus at a most receptive stage for the culture of bacterial agents; in short, that a parturient woman is essentially in the condition of a wounded woman, with more or less solutions of continuity in the genital tract, offering a possible chance for the entrance of microbes. Such, I say, briefly considered, may be taken as correctly reflecting the position of the profession to-day upon the subject under discussion.

In this connection it is interesting to relate some of the singular phases of sepsis occurring in the face of strict antiseptic precautions, practiced along the lines of modern teachings. Whilst they may not serve as irrefutable evidences in support of an opposite view, they are none the less worthy of explanation in substantiation of the present position. The celebrated case of Dr. Rubber of Philadelphia, with which the profession at large is familiar, who, in the year 1843, before the days of antiseptics, it is true had forty-five cases of puerperal sepsis, is unique to say the least of it. It is recorded that the doctor went to the veriest extremes in personal cleanliness; bathed, shaved head and face, wore a wig, changed his clothing and even left the city for a period of ten days; on his return, some two weeks later, the first case of obstetrics, although an easy and normal one, died of septicaemia. It might be argued that had the doctor bestowed as much time in rendering his patients as aseptic as he did on himself, his experience would have been different, and, yet a prominent man with a practice among the best, it is to be presumed that most of his cases were among a class whose attention to the details of personal cleanliness could not be questioned.

In one ward in one of the maternity hospitals of New York, not long since, it is recorded that two women were delivered on the same day; the first a macerated foetus and a stinking placenta. The uterus was promptly irrigated with the regulated

antiseptic solution; the patient did well. The second, a healthy woman and a natural labor, conducted under strict antiseptic precautions, narrowly escaped death from puerperal sepsis. The infection, the author tells us, was conveyed from patient No. 1. Here you will perceive a freak of the microbe, a soil sick in elements for its developments is abandoned, and a field at a distance less favorable, by reason of a rigid adherence to the rules of asepsis (with antiseptics, I will add) is selected, takes root and develops the conditions.

Without multiplying instances occurring in the presence of a practice in accordance with modern teachings, let us pass at once to the consideration of the question. Whether or not the attending physician in a case of obstetrics must be held responsible for the occurrence of puerperal sepsis? I am aware, for the most part, the trend of medical thought, as daily reflected through the journals, is to the effect that the causes are clearly preventable, and a case in the practice of an accoucher, if not less than criminal, is certainly very reprehensible and worthy of severe condemnation. To assume so radical a position one must deny a class of cases, where the source of infection was autogenetic and not from external causes. Dealing, however, with the subject purely from the standpoint of the latter, are all cases traceable to failure to secure surgical cleanliness, as maintained by many? What, we may ask, constitutes surgical cleanliness? Is asepsis to be obtained only through the use of antiseptics? The modern surgeon contends so, and his practice is always rigidly along this line, and the modern obstetrician is none the less emphatic in his demands in the same direction.

What are some of the methods in vogue to secure the prevention of puerperal sepsis? Before and after labor, unquestionably, the most common is the vaginal douche, with antiseptic solutions of given strength and medicament. Is this practice itself devoid of danger? Is it always necessary? And does it commend itself upon sound common sense principles? Statistics, gathered from the records of Guy's hospital are worthy of reproduction here, since they present an array of facts altogether too strong to be brushed aside without proof to the contrary. These figures show that during a period of three years, with 9,097 cases of confinement, there was a septic mortality of only 10 per cent., without the use, too, of the vaginal douche in a single case of this given number. This would appear, indeed, to be an excellent test as to the value of this method of treatment.

In this connection the argument is too often advanced that the syringe itself is frequently the means of infection, since it is occasionally an old one, having been used for all sorts of cases.

and conditions. I am of opinion that too much stress is attached to this point and not enough to the questionable propriety of the practice; with even a new syringe, and the regulated solutions, let us, gentlemen, examine for a moment briefly into the practice so often advocated and carried out in a few hours after child-birth, in the absence, too, of any evidence whatever of sepsis, with vaginal irritation of the carbolic and bichloride solutions. Is the process based upon sound physiological reasoning, and when rigidly enforced not without the dangers of pathogenic consequences? May not nature's efforts at repair be retarded and even prevented by this constant disturbance? Granting there are abrasions and breaches of continuity, does not the regular irrigating process rob nature of its provisional covering? Are not these surfaces kept clean thereby and in consequence in a perfect state for the absorption of hurtful matter? If the medicated solution is of sufficient strength to destroy these lower forms of animal life, may not the delicate mucous membrane and microscopical epithelium be destroyed, too, by its chemical and corrosive action? If so, may not this disintegrated tissue itself undergo decomposition and thereby afford a rich soil for the culture and development of the very condition we are endeavoring to prevent?

Finally, gentlemen, and a very pertinent query in this connection: Is the practice itself, except under the supervision of a scrupulous exactness, a condition confessedly not always attainable with the average nurse, unattended with danger to the parturient woman? Authentic reports of deaths from the use of these agents, as prescribed and recommended by those whose teachings are quoted and accepted as authority openly attest to the contrary. Coming down to my individual experience, admitted to be limited, and yet in a limited field we all sooner or later must encounter this condition, it has been a matter of forced observation with me that some of the most annoying, and, if you please, severe cases of puerperal sepsis in my own practice have been in cases where my efforts to avoid it have been more rigidly along the lines of modern methods. I will go further and make the unqualified statement that the smaller percentage of my cases have been among those where it was impractical to properly carry out asepsis and indeed where the surroundings have been more conducive to the propagation of the disease, from the standpoint of its microbic origin.

During a practice of a number of years among the negroes of the South, where not the slightest attention was paid to anti-septic precautions, and where the usual attendant in charge was an ignorant midwife, and where the lubricant for the finger in

making digital examinations was most usually rancid lard, exposed always to atmospheric impurities, I fail now to recall a single case of puerperal sepsis in my practice. My father's experience, covering a period of nearly forty years in the same locality, was largely confirmatory of my own. In short, the nearer we approach to nature's simple and unaided methods, as witnessed in animal life, where the disease, if present at all, is so rare as almost to escape record, the greater the freedom from its ravages.

Now, I do not wish to be arrayed on the side as decrying the use altogether of antiseptics, or denying their efficacy under proper restrictions and in well defined indications; statistics and experience attest in unmistakable terms to their absolute need. No intelligent physician, at the present time, would undertake to oppose their proper use, and right here I desire to raise the question, when is it proper to use the vaginal syringe? What is the practice of the members in this direction? Personally my convictions are becoming more pronounced against this routine practice, and I am free to confess were I limited to its use before or after labor, I should incline to the former, thoroughly cleansing the vagina at the outset, discarding the post partum douche entirely, as long as all evidence of sepsis was wanting. I believe it to be perfectly consistent with a safe and efficient method for the attending physician in all cases, when called at the beginning of a given case of labor, to cleanse, or have it done, the vagina and external genitalia thoroughly with hot water and a good soap, using the same process with a nail brush in preparing his own hands. His conduct, afterwards, throughout the entire course of active labor, should strictly forbid undue examinations per vaginam; in short, avoid anything tending towards meddling midwifery, observing cleanliness as far as it is possible to do so, to the full completion of the third stage.

The use of postpartum irrigation should be reserved until the third or fourth day, and not then unless the discharge become slightly foul; in this way nature's methods, always at repair, are not disturbed, and the case will, in the great majority of instances, be conducted to a successful issue without further aid.

Before closing, gentlemen, I wish to emphasize the position that in the face of this line of practice, either with or without antiseptic remedies, it is not always possible to prevent puerperal sepsis, and that its presence, even in this day of extreme modern antiseptic precautions, should not be given in evidence of criminal neglect, as advocated by some. If such a sweeping conclusion is to be drawn, why, let me ask, does a second journal contain a clipping giving a study of forty cases of puerperal sepsis in the wards of Johns Hopkins Hospital, where the facilities for executing the most rigid adherence to the rules of asepsis have not served to prevent its occurrence?

ACUTE BROCHO PNEUMONIA IN CHILDREN.*

By CHARLES PINCKNEY HOUGH, M.D.,

President of Rocky Mountain Inter-State Medical Association; Member American Medical Association; Member Association of Military Surgeons of the United States; Member Medical Association of Montana; Member State Medical Society of Utah,

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Mr. President and Gentlemen: I will not trespass upon your valuable time with tedious and laborious references to pathological anatomy, physical signs and symptomatology in this most serious and frequent disease, it being a fair presumption that all are informed on those essential points upon which our text books are quite agreed.

Broncho-pneumonia, usually designated catarrhal pneumonia, is essentially the pneumonia of infancy. It is a bilateral disease, and when fully developed gives scattered areas of dullness on percussion. In this disease we should bear in mind the double circulation of the lungs; that is, the functional and the nutritive,†and also remember the pulse-respiration ratio common to infants in health, and, as found in pneumonia,‡this is often the principal diagnostic feature early in the attack, that attracts the attention of the observing and wide-awake physician, which, with a high temperature always expected, and circumscribed rales, is good ground for apprehending this often insidious disease.

Nearly all cases of primary pneumonia in children under two years of age are of this kind, as are nearly all secondary pneumonias during childhood. In the primary affection, the mortality is high on account of the age, and in the secondary form on account of the complications to which it is sequel. It is very infrequent after four years of age as a primary disease. Male children seem to be more subject to it, and about 70 per cent. of the cases occur in the winter and spring, children with poor hygienic surroundings being most frequently attacked. Exposure to cold and sudden atmospheric changes are still recognized as potent factors in its causation. To this fact I would especially ask your attention, you may protect some precious little one if you still believe that people catch cold or catch hot, as you may choose to term it. Broncho-pneumonia as sequela to diphtheria is usually due to the streptococcus infection. In twenty-five cases reported by Netter, in which only one form of bacteria was present, in ten only the pneumococcus was found, in

*Read before the Wyoming State Medical Society.

†A. H. Smith.

‡W. P. Northrop.

eight only the streptococcus, in five only the staphylococcus, and in two only the Friedlander bacillus; this observation of the different kinds of cocci by the microscope would suggest some factor of irritation preceding their activity. In primary cases the pneumococcus is nearly always present, and in a large per cent. of such cases it appears alone. The mixed infection is common in secondary cases, while those cases that show the streptococcus infection are usually the most severe. The cases resembling lobar pneumonia are usually due to the pneumococcus infection.

I think it would be wise if authors and teachers would discard all synonyms in writing and lecturing upon this disease. It would do away with much confusion in the minds of medical men. The more clear our understanding in pathology, the wiser and safer our therapeutics.

The rule is for the catarrhal inflammation to extend from the bronchial tubes to the bronchioles and air vesicles, yet in some cases the disease would appear to begin in the bronchioles and air vesicles at the same time. A very large per cent. of autopsies show very general disease in both lungs; while the pathological process may be arrested at any stage, death may also occur at any stage. Resolution sometimes takes place quickly, but when it is very slow or only partial, there is likely to be recurring attacks, after which you may have chronic interstitial pneumonia. Pleurisy is almost invariably found over every large area of dullness after the fourth day, while autopsy in cases fatal on or before the third day show that up to that time the pleura is normal or only congested. Large serous effusions are rare in the pleural cavity; the disease is without typical course; while prostration is extreme from the beginning, cyanosis is usually present in some degree and is rarely absent before the fatal issue. Cough may be slight or absent; cerebral symptoms are often quite prominent. Physical signs are often few and slightly marked. Death has been reported within twelve hours after the attack, diagnosis being verified by autopsy. This type of disease passes for malignant scarlet fever or measles, with suppressed eruption, or possibly cerebro-spinal meningitis. We should not overlook this serious feature and should always examine the lungs in infants who are suddenly taken ill with embarrassed respiration, cyanosis or cerebral symptoms. The severity of the symptoms in these cases is explained by compression of the air vesicles from the intense engorgement of the tissues, almost as much as from the exudates.

The treatment is largely a matter of individual personal experience, influenced for or against the patient in accordance with the good judgment and attention of the mother or nurse,

as well as the therapeutic ability of the physician. A close clinical observer once said that in broncho pneumonia we can do but little for the disease, but much for the patient. This being recognized to be most frequently secondary pneumonia, we should not overlook prophylactic measures in those diseases that are chiefly productive of broncho pneumonia. The nose, mouth and pharynx should command our attention and be kept as clean as possible. The position of the patient should be often changed, and expectoration should be aided and encouraged. Tepid bathing and cold douching is recommended as an efficient agent in preventing broncho pneumonia, or, if it be in the incipient stage, checking its further development. By some the cold pack is preferred. The child should have a large, airy room, with an even temperature of not less than seventy (70). The atmosphere should be kept somewhat moist with vapor. The diet should be nutritious and easily assimilable; the bowels should be freely moved, by preference with calomel. Alcohol or a combination of alcohol and strychnia should be given in sufficient amount to maintain a good heart action. The preparations of ammonia with expectorants, while condemned by some, are generally accepted as being beneficial. It is my custom to irritate the chest with mustard, afterwards freely with camphorated oil, or simply use camphorated oil and turpentine, covering the chest with flannel or cotton wadding, not changing it until it becomes soiled from the excretions. I never use the oiled silk jacket, as I wish to give the full benefit of evaporation. I have much faith in diaphoresis in broncho-pneumonia. The kidneys receive my especial care. Since this is not a self-limited disease and we can not calculate as to its duration, I would urge especial attention to the diet and drink. A new fad in the diseases of infancy is to rely largely on the latter, to which I give my partial endorsement, believing it to act as an eliminant. As a rule, children get too little water, especially when indisposed. I have confidence in quinia as a tonic, in combination with ammonia and digitalis. Aconite is an efficient remedy in the acute stage. I am wholly without experience with the cold bath and pack, but frequently resort to the hot mustard bath in threatened collapse or sinking, and have had from it prompt and happy effect. In reducing the temperature, cold to the head and sponging the face and upper extremities give good results. I have found it quite impossible to adopt in my family practice many highly praised hospital methods, and have believed it good judgment not to try to force methods of external treatment wherein I could not have the full co-operation of the family and the nurse. It is possibly mortifying to confess unfamiliarity with the highly commended

antipyretics, the cold bath and the cold pack, but a due regard for truthfulness justifies the statement. When mucus accumulates and the patient cannot expectorate, an emetic of ipecac or alum is beneficial. Strychnia through central stimulation is an aid to expectoration. The alternating of the hot and cold douche is said to be efficient. Frequent cough frees the bronchial tubes, but if it be annoying I use small doses of antipyrin or tinct. opii. camph. Oxygen gas is by some used with satisfaction, and the inhalation of creosote is said to be good. For extreme nervousness the bromides, antipyrin and phenaticin are used, while for failing circulation I would commend the hot mustard bath, strychnia, nitro-glycerine, nitrite of amyl, or perhaps atropia or caffeine, hypodermically. Good and intelligent nursing and feeding is, in my opinion, the great essential, and in this particular trouble I place as much confidence in wise and tender motherly care as I do in medication.

ANCIENT VERSUS MODERN THERAPEUTICS.

By JOHN R. BAER, M.D.,

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Philadelphia, Pennsylvania.

The old saying, "Do not throw over an old and tried friend for one yet untried," does not seem to apply to medicine as much as to some associations of life, for in this progressive age of ours science has made and is constantly making such wonderful strides forward, that only those of us who take advantage of these opportunities of advancement can be classed amongst the modern therapeutists, and I fear too many of us belong to the class that is unwilling to take up any new preparations brought to our notice, because they are new and have not yet been used for decades, even though they come to us very highly recommended by scores of our brethren. They are still new to us because we have not given them a trial, and instead of trying them and advancing in our therapeutics, we are willing to plod along at the same old gait and to be overtaken and passed by our more ambitious brethren with the remark, "Dr. A.; yes, he is all right, but the truth is he does not keep posted; his treatments are obsolete; I am sorry for the old gentleman, but he is losing ground daily," which is only too true. Do not misunderstand me. It is not by aimlessly jumping from one new preparation to another that we succeed, but if we find one treatment exploited, one drug explained, giving better results than what we are get-

ting, we are surely serving the interest of our patients better by cautiously adopting those treatments and drugs and slowly dropping our old friend as our experiment in the new warrants our faith; in other words, drop the ancient and adopt the modern therapeutics. I have in mind one particular case where adopting the above brought about the best of results and paid very well both financially and in the gaining of new patients, while the consultants, by adhering to old methods, lost all. I will give the complete history and let you judge which of the two pays best in results.

N. D., aged 6, female. On the 25th of October, 1898, while she and her sister were playing with matches, they ignited and set fire to the dress of N. D. The result was a most severe burn, extending from the ninth rib on the left side to axilla, and from axilla to forearm. The pain (goes without saying) was dreadful and the shock severe. I was called in immediately after the accident and found the patient almost hysterical from pain. I at once gave her morphia. After the quieting effect of the opiate began to show itself, without any further ado I covered the wound with dressing of Unguentine. In a very short time the cries ceased and the child went into a quiet sleep. The family physician, with my permission, was called in, and he advised carron oil. I put that on and the next morning when I called the dressing stuck to the wound and was removed with considerable difficulty. I again put on the same dressing with the same result. Then I refused to use carron oil again and went back to Unguentine. The next time I took off the bandage the dressing proper fell off of its own accord. The result was a pleased child and a grateful mother. The consultant came and was very much provoked at my presuming to change the dressing and ordered me back to the old dressing. This I refused to do. He then sent the family vaseline to use. I tried it once and went back to unguentine. Consultant again condemned unguentine, and this time he sent me one pound of cold cream. I applied once as before and then went back to unguentine again. This time the consultant refused to call again unless I was dismissed from the case. Unguentine won the day and I remained. The other physicians consulted all agreed that this child would be dreadfully scarred, no matter what the dressing would be. I kept on with my dressing and the result was a very complete recovery, without a scar to show for it, no eschar tissue having formed, and having had no trouble transplanting skin, not even having had to wash or cleanse the wound, as the dressing seemed to take care of itself. I was very highly gratified at the results. Would not you be so, Doctor?

I hope this will be read and accepted in the same kindly spirit in which it was written.

PHARMACOPOEIA CONVENTION.

UNIVERSITY OF PENNSYLVANIA,
PHILADELPHIA, PA.

May 1, 1899.

To All Whom It May Concern:—In accordance with instructions given, by resolutions passed at the National Convention for Revision of the Pharmacopoeia of the United States of America, held in Washington, A.D. 1890, I herewith give notice that a General Convention for the Revision of the Pharmacopoeia of the United States of America will be held in the City of Washington, D.C., beginning on the first Wednesday in May, 1900. It is requested that the several bodies represented in the Convention of 1880 and 1890, and also such other incorporated State Medical and Pharmaceutical Associations, and incorporated Colleges of Medicine and Pharmacy, as shall have been in continuous operation for at least five years immediately preceding this notice, shall each elect delegates, not exceeding three in number; and that the Surgeon-General of the Army, the Surgeon-General of the Navy, and the Surgeon-General of the Marine Hospital Service shall appoint, each, not exceeding three medical officers to attend the aforesaid Convention.

It is desired that the several Medical and Pharmaceutical Bodies, and the Medical Departments of the Army, Navy and Marine Hospital Service shall transmit to me the names and residences of their respective delegates, so soon as said delegates shall have been appointed, so that a list of the delegates to the Convention may be published in accordance with the resolutions passed at the 1890 Convention for the Revision of the Pharmacopoeia, in the newspapers and Medical Journals in the month of March, 1900.

Finally, it is further requested that the several Medical and Pharmaceutical Bodies concerned, as well as the Medical Departments of the Army, Navy and Marine Hospital Service, shall submit the present Pharmacopoeia to a careful revision, and that their delegates shall transmit the result of their labors to Dr. Fr  derick A. Castle, 51 West 58th Street, New York City, Secretary of the Committee of Revision and Publication of the U. S. Pharmacopoeia, at least three months before May 2, 1900, the date fixed for the meeting of the Convention.

H. C. WOOD,

*President National Convention for Revising the U. S. Pharmacopoeia,
Held in Washington, D. C., 1890.*



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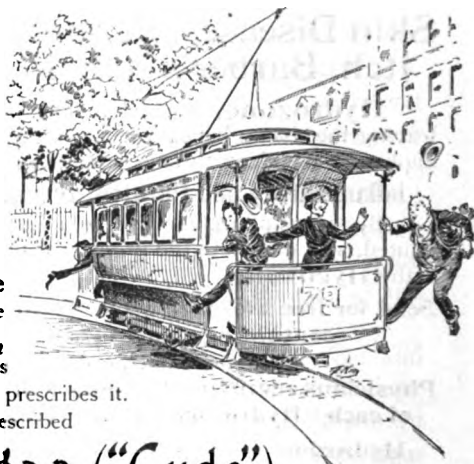
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EDITORIAL DEPARTMENT.

Treatment of Common Gastric Diseases.

In functional and organic diseases with excitement, there is generally excess of free hydrochloric acid in the gastric secretion, and such cases need sedative diet and medication. The diseases with depression are marked by hypochlorhydria, and require for their relief stimulating food and medicines. According to Dr. Alfred W. Perry, (*Pacific Medical Journal*, March) milk is the most sedative and potatoes the most exciting articles of food. One-half to one pint of warm milk, taken at the beginning of each meal, lessens the quantity of free acid which other more stimulating foods would cause to be secreted. Fine division of fish and meat allows more rapid and complete combination with HCl and hence leaves less free acid. Only enough starchy food (corn or wheat bread, rice, wheaten mush)

should be taken to preserve nutrition in these cases. Potatoes must be avoided or taken sparingly, and all spices, condiments and salt foods let alone. Sedative medicaments include insoluble bismuth salts, 20 to 40 grains a few minutes before meals; sodium bicarbonate, 10 grains, four or five times after meals, at ten minutes interval, for hyperacid pain; and sodium sulphate, 40 to 60 grains, an hour before a meal, to restrain the formation of excessive mineral acid. Pepsin is useless, and iron, strychnine, quinine, and most other bitter remedies, are harmful.

In hypochlorhydria or anachlorhydria, on the other hand, we should advise a stimulating diet, consisting of koumiss, well seasoned meats finely minced, vegetables which have been passed through a sieve, hard breads, toast, crackers, and a moderate amount of fats. Sugar and alcohol must be avoided. Medication should include strychnine and other vegetable bitters and hydrochloric acid, along with guaiacol or creosote if there is gastric fermentation.

Motor impairment is relieved to some extent by taking foods and drinks hot and finely divided, and by abdominal massage and daily laxatives. High degrees of stomach stagnation are amenable only to surgical measures.

Dr. O'Dwyer. A committee of over forty physicians, representing sixteen different medical societies of the City of New York and including representatives of both schools of medicine, has been formed for the purpose of doing honor to the memory of Dr. Joseph O'Dwyer.

The first meeting was held at the N. Y. Academy of Medicine, Nov. 22, 1898, under the chairmanship of Dr. J. D. Bryant, and was mainly devoted to organization. Dr. Geo. F. Shrady was elected permanent chairman, and Dr. Alfred Meyer permanent secretary, and the following Committee on Scope and Plan was appointed: Dr. Dillon Brown, chairman, and Drs.

Robert Abbe, R. G. Freeman, L. Emmet Holt and Louis Fischer.

At the second meeting, held at the Academy of Medicine, March 13, 1899, the report of the Committee on Scope and Plan was adopted and now only awaits final action of a meeting of the full committee.

The memorial to Dr. O'Dwyer will probably take an educational form, for by the plan now outlined it is proposed to raise a fund of \$30,000, the interest of which shall support two O'Dwyer Fellowships in Paediatrics, open to competition by physicians who graduate in the United States, and to be held by the successful competitors for a period of two years. During this period they must furnish satisfactory proof of their engagement in original research work to a committee of five, one of whom shall be appointed by the President of Harvard University, one by the Dean of the Johns Hopkins Medical School, one by the Provost of the University of Pennsylvania, one by the President of the University of Chicago, and one by the President of the New York Academy of Medicine.

Many details of this general plan are still to be arranged, which it shall be the agreeable duty of the secretary to furnish to the medical press of the country so soon as they are finally decided. This preliminary notice has for its object merely to acquaint the profession with the fact that a movement of this nature is on foot, and that an effort will be made to give it the international character so fitting as a memorial to an investigator of international reputation.

Medico-Chirurgical College Wins. The Medico - Chirurgical College petitioned the Common Pleas

Court No. 3 for leave to amend its charter so as to grant the diplomas and degrees in dental surgery, etc. This was resisted by the Philadelphia Dental College on the ground of want of authority to do so, etc. The Common Pleas Court decided in favor of the Medico-Chirurgical College and the Dental

College took an appeal from this decision. The Supreme Court, in an opinion by Justice Dean, has confirmed the decision of the lower court and dismissed the appeal.

Formaldehyde Inhalations in Phthisis. Murrell (*British Medical Journal*, Jan. 28) has found that a large proportion of tuberculous patients, in any stage, are markedly benefited by the inhalation once or twice daily of compressed air, made to bubble through a 6 per cent. solution of formaldehyde. The same strength of formalin vapor completely checked the growth of recent culture inoculations with tubercle, whereas the oils of cinnamon and peppermint exerted no retarding influence whatever.

Cystitis and Pyelitis. To differentiate the former disease from the latter, J. A. Wesener (*American Gynecological and Obstetrical Journal*, January) remarks that in cystitis there is always more pus; in pyelitis more albumin, oftener red blood cells and sometimes renal casts. The reaction in both conditions is usually acid, but may be alkaline with deposition of triple phosphate crystals. Infection by the bacillus coli communis, diplococcus liquefaciens, streptococci and microcococci tends to acidity, whereas the bacillus proteus vulgaris converts urea into ammonia.

Cervical Lymphatic Glands. When glands enlarge in the neck we should seek to discover the source of infection through the lymphatics and treat this as well as the adenitis. According to Miller, (quoted in "Progressive Medicine") the lymphatics of the occipital glands come from the posterior part of the scalp; those of the mastoid glands from the scalp and ear; the superficial parotid from the front of the scalp, forehead, temple and external meatus; the deep parotid from the orbit, nose, pharynx, middle ear and

teeth of the upper jaw; the submaxillary from the cheek, tonsil, pharynx, esophagus and larynx; the lower sternomastoid from the deeper structures and secondarily to the upper ones; the supraclavicular from the intrathoracic and axillary regions. The writer advises, if the glands are firm and not large, to try ichthyol inunctions and the internal use of iodides, tonics, nourishing diet and cod-liver oil.

Internal Medication in Acute Gonorrhea. In posterior urethritis and in some severe cases of anterior urethritis a valuable aid to irrigation, according to George Knowles Swinburne (*Journal of Cutaneous and Genito-Urinary Diseases*, March)

is the regular administration of a pill or capsule containing one or two grains of methylene blue and four grains of boric acid. The only objection is that the blue color imparted to the urine may stain the under-clothing.

Mammary Extract of the Sheep in the Treatment of Uterine Fibroids. Dr. John B. Shober renews the subject in the February number of the *American Journal of Obstetrics and Diseases of Women and Children*.

He has found this agent of marked value in checking menorrhagia and metrorrhagia, whether due to fibroids or not. Under its influence the menstrual periods have become regular and less painful, and the tumors have diminished in size. His method of employment is to administer three to six tablets daily, each containing two grains of the desiccated powder and three grains of excipient. One tablet is equivalent to twenty grains of fresh gland. In full doses the remedy may produce cramp-like sensations in the tumor. No other treatment is used, except measures to keep the bowels regular and occasionally tonic doses of strychnine or nux vomica. Positive results, says the writer, may be expected in from six to eight weeks.

Bacterial Origin of Eczema. Van Harlingen, in a recent journal contribution (*International Medical Magazine*, February) advocates the plausibility of this theory. He calls attention to the presence of certain morococci and bacilli in some forms of the disease, and to the marked clinical resemblance of seborrheic eczema to well known parasitic affections of the skin. In eczema intertrigo the growth of the parasites and extension of the disease are favored by the heat and moisture developed between opposing skin surfaces. The remedies commonly employed in the treatment of eczema are, moreover, largely directly or indirectly parasitocidal in nature. Some act as keratoplastics, others as keratolytics, breaking down and opening the deeper tissues, destroying the germs by inflammatory action and by washing them away mechanically.

Wheat Jelly in Infant Feeding. Next to milk, the whole wheat kernel represents the nearest approach to a complete food that is known. We are reminded of this fact by Bulkley (*St. Paul Medical Journal*, April) who, after ten years' use, recommends it in the form of a jelly, a teaspoonful or tablespoonful to each feeding, in cases where milk alone disagrees and nutrition is at fault, as indicated by persistent and recurring eczema. The jelly should be made fresh every day, exactly as follows: A teacupful of ordinary coarse wheaten grits, or crushed wheat, is put into a pint of cold water, in a china receptacle, in a double rice or milk boiler. This is placed on the fire at the time of preparing the evening meal and allowed to cook slowly for two hours. It is then covered and set aside over night. In the morning more water is added to make it quite thin, and it is cooked slowly for two hours more. The product is then turned into a fine sieve and rubbed with the bowl of a spoon, more water being added if necessary, until all the soft desirable portion has passed through, leaving the hard, siliceous coating

on the sieve. The gelatinous mass thus obtained is readily miscible with water or milk and passes easily through a feeding bottle.

Cauterization of In a course of experiments on 287
Mad Dog Bites. guinea pigs inoculated with the virus of rabies, (*Medical News*, March 18)

Follen Cabot found that over 90 per cent. of the animals could be saved by cauterizing the wound with fuming nitric acid after an interval of twenty-four hours; presumably more would have lived had the acid been used earlier. The actual cautery was used on 59 animals, and of these 70 per cent. lived. Lunar caustic apparently saved 55 per cent. in a series of 37 animals, and simple swabbing out of wounds 31 per cent. of 26 animals. Control experiments proved that from 12 to 16 per cent. of guinea pigs possess a natural immunity from rabies. The writer concludes that in the case of small rabietic wounds all the treatment probably indicated is thorough cauterization with nitric acid within twenty-four hours from the time of infection.

Early Diagnosis of Twelve years ago Weichselbaum,
Epidemic Cerebro- of Vienna, demonstrated the pres-
Spinal Meningitis. ence in cases of spotted fever of a pathogenic diplococcus, which he termed the diplococcus intracellularis meningitidis. In the *Northwestern Lancet* of March 15, Dr. A. B. Kibbe, who had experience with the late Alaska outbreak of the disease, calls attention to the practical importance of searching for this germ in the nasal secretion, in which, he says, it is present in 80 per cent. of all cases and at a period often preceding involvement of the brain membranes. These diplococci strongly resemble the "coffee beans" of gonorrhea, and, as the name implies, are situated within the pus cells. They stain readily with any of the anilin dyes, but do not, according to the writer, react to Gram's method. Rarely they may be present in small numbers in coryza and

pharyngitis without development of the specific nervous infection. The germ grows in artificial media only at body temperature and best on Loeffler's serum.

Etiology of Movable Kidney. The causes of this condition are recapitulated as follows by Professor C. S. Bacon (*American Journal of Surgery and Gynecology*, February):

The displacement is due to a combination of two kinds of causes, those which weaken the kidney attachments and those which diminish the support furnished by intra-abdominal pressure. Pressure above the diaphragm or tight lacing may weaken the attachments, as also may traction made by the ureters, colon or duodenum, or a blow or jar or other trauma. Gravity is always an important factor, particularly when there is a kidney enlargement from disease, tumor or menstrual congestion. The attachments are sometimes congenitally weak and may be weakened by emaciating disease, with absorption of fat. Intra-abdominal pressure is lessened or destroyed by relaxation of the abdominal walls or injuries to the pelvic floor, often the sequelae of labor, laparotomy or emaciating disease.

The Pupil in Health and in Disease. The diseases of the eye which furnish positive or negative diagnostic evidence from the size, shape and condition of the pupil are summarized as follows by F. G. Stueber (*Cleveland Medical Gazette*, March): "Conjunctivitis, iritis and glaucoma; also keratitis, scleritis and cyclitis, in relation to iritis, secondary to these diseases. The diagnostic point between conjunctivitis and iritis is the presence or absence of pupillary reaction to light. Both in iritis and glaucoma the pupil is immobile, but in the former it is contracted or unevenly dilated as a rule, while in glaucoma the pupil is moderately well dilated. In the differential diagnosis of these two diseases the tension is the all-important determining sign. In keratitis, scleritis and cyclitis the

iris may become involved; a sluggish pupil is an early symptom, while partial or complete immobility denotes secondary iritis."

Final Report on Schlatter's Case of Removal of the Stomach. This has been made by Schlatter himself in the *Medical Record* of March 18. He states in conclusion that the death of the patient was due to multiple carcinomatous metastases, and could not at all be ascribed to inanition from insufficient nutrition. "An entire year had the 57-year-old woman lived free from suffering, without a stomach, and had even gained, notably in body weight, in that time. Up to within the last week of her life she had been able to go about outside the hospital, but then, with the appearance of cachectic symptoms, had rapidly succumbed to her malady."

The Hot, Dry Air Treatment of Rheumatism. An editorial in the *International Medical Annual* criticises this revival of an old method as being generally useless and harmful in regard to permanent effects. The excessive or long continued application of dry heat, he says, tends to destroy the functional activity of the skin and impairs the nervous mechanism of the joints. A more simple, convenient, comfortable and efficient application of local heat than can be made by any of the patented appliances is as follows: "Six thicknesses of flannel of convenient size are sewn together; these are wrung out of water at 120° F., and wrapped around the joint; over this is placed a hot-water bottle filled with water, and the whole secured with a flannel wrapper."

Intractable Gleet. The causes of this troublesome condition, in the order of their frequency, are stated by E. Hurry Fenwick (*International Medical Annual*) as follows: Membranoprosthetic catarrh, sensitive congested patches in the penile

urethra; granular urethritis (granular patches); glandular urethritis, i. e., inflammation of the urethral glands in the penile portion; ranula of Cowper's duct; urethral warts; deep changes in the prostatic urethra, such as infiltration of the verumontanum, disease of the sinus pocularis or of the prostatic sinuses; finally, and least frequent, sub-acute inflammation of the seminal vesicles. All these lesions may be readily and clearly seen by electric urethroscopy with inflation. The best treatment consists chiefly in the local application of silver nitrate, 5 to 20 grains per ounce and the use of the simplest surgical procedures, such as excision of warts with the edge of the inspecting cannula.

Influenza in Infants. Speaking of the widespread epidemic of last winter, Prof. Charles C. Donovan (*Pediatrics*, April 1) alludes to the sudden onset with excitement, fits of vomiting, high fever, rapid pulse, restlessness and great prostration as being characteristic of this disease in children. He recommends but little food (milk), cool water freely, confinement to bed in a quiet room at 75°, and calomel in small doses to control constipation and vomiting; antipyretics are best withheld. Convalescence is rapid as soon as the fever abates, which is usually within two or three days, unless bronchitis or bronchopneumonia complicates.

Microscopic Diagnosis of Trachoma. In doubtful cases the following method is recommended as certain by E. F. Snyder in April *Medicine*: The contents of a follicle are expressed and spread thinly and evenly over four cover-glasses, two of which are fixed in a flame, and the others in absolute alcohol for ten minutes. One of each kind is now stained according to the ordinary Gram method. The other two are stained according to the Gram-Weigert method, lithium carmine being employed as the counter stain, showing the bacteria as a deep violet on a bright

carmine background. The trachoma diplococci are minute ($\frac{1}{2}$ to 2 m. in length and 5 m. in breadth) and encapsulated, not decolorized by the Gram method. The septum at times has an affinity for anilin stains, causing the diplococcus to simulate a bacillus.

Coccygeal Munde says (*Medical News*, April 15):

Pain. Mere pain in the coccyx, when unconnected with dislocation, fracture or disease of its periosteum, is no evidence of pelvic disease, but usually a sign of general neurasthenia, and almost invariably associated with pain or ache in the favorite locations of that distressing affection, viz., base of the sacrum, intrascapular, cervical, occipital, left parietal and supraorbital and left submammary regions.

Treatment of Enteralgia. In severe intestinal colic, says Lyman, (*Clinical Review*, April) a hypodermic

injection of morphine and atropine should be given, or, if this should be insufficient, a half dram of chloral hydrate by the mouth and thorough irrigation of the colon with hot water. A large, hot, linseed poultice, into which a dram of chloroform has been stirred, should be laid over the entire abdomen. Hot mint tea or hot camphor water may be given as a beverage. As soon as some degree of relief will permit, 10 grains of calomel with 5 grains sodium bicarbonate should be administered. Hysterical cases may require ether inhalations or rectopubic faradism. Milder forms of enteralgia in children and young people are generally relieved by a dram or two of paregoric with a few drops of essence of peppermint, made into a toddy with a cup of hot, sweetened water, followed by a gentle cathartic of rhubarb and magnesia and discretion in diet. Infantile intestinal colic is readily relieved by a few drops of Dewee's carminative, a preparation containing magnesia, asafoetida and opium. The vague neuralgia often experienced by elderly arthritic subjects, when fatigued, can be promptly relieved, says the

writer, by eating a little dry bread, or by drinking a cup of hot broth or milk and lying down for a short time. In such cases, if there is accompanying gastralgia, the acid should be neutralized by a powder containing 10 grains each of bismuth salicylate and calcined magnesia and 5 grains of sodium bicarbonate. The underlying constipation should be obviated by cascara, butcher's meat should be prohibited for weeks or months, and the general health must be invigorated by daily exercise, hydropathic measures and change of air.

Treatment of Migraine. In a clinical lecture at the New York Post-Graduate, Joseph Collins (*Kansas City Medical Index*, March) spoke of the necessity of treating the patient as well as the attack. Among the factors that contribute to prophylaxis are an active out-door life; avoidance of alcoholics, tobacco, tea and coffee, over-eating, sexual excesses, late hours, worry, and strife; careful supervision of the diet, vegetables predominating, with comparatively little meat and plenty of water; attention to the bowels, but not large doses of saline cathartics; removal of reflex irritation in any organ; the systematic use of hydriatics, massage, gymnastics, and electricity, simple bitters for anorexia, alkalies or acids as the reaction of the gastric juice demands, iron, arsenic and quinine as tissue restructives, and bromides in abundance of water at bedtime for a long period, as in epilepsy.

The treatment of the attack includes absolute rest and quiet and the administration of some of the coal-tar remedies, or rarely morphine. The writer recommends 10 grains each of salol and phenacetin and 2 grains caffeine salicylate, to be taken with hot milk or hot water and whiskey, and repeated once only at the end of three hours, if necessary. If the face is flushed, showing vasomotor paresis, a capsule containing 2 grains each of camphor, salicylate of menthol and

salicylate of caffeine will be found useful. When there is vasomotor spasm, amyl nitrite by inhalation will relieve, though it will not shorten the attack. After a severe attack the patient should be built up by the use of readily absorbable and highly nutritious substances, so as to be fortified against the next nerve-storm.

Treatment of Fevers. Professor Wm. Henry Porter disputes the advisability of the Brand method (*Post-Graduate*, April) since it increases the abstraction of heat from the body, while in fevers, as the author seems to prove mathematically, there is already decreased food oxidation and heat production. The chief things to be accomplished are to eliminate as rapidly as possible the unknown toxic agents, and at the same time augment the digestive and secretory and excretory functions of the body. Personally he prefers for intestinal antisepsis 10 grains of blue mass and a compound cathartic pill, repeated as necessary. In all the years that he has practiced medicine, he has given but three cold baths.

The Diaphragm Phenomenon. From an experience with 220 cases, Richard C. Cabot (*Medical News*, April 15) arrives at the following summary: In 102 normal chests, the diaphragm shadow showed an average excursion of $2\frac{2}{3}$ inches on each side of the chest. In 11 cases of pleuritic effusion, 5 cases of adherent pleura and 3 cases of acute dry pleurisy, the shadow was absent on the affected side. In six cases of emphysema, the shadow was either absent or nearly absent. In 30 cases of phthisis, the excursion of the diaphragm was diminished on the affected side (except in one case); even incipient cases may show this change. Muscular weakness may greatly limit the excursion of the shadow. In obesity it is often missed. It may be obtained only during a fit of coughing. Great enlargement of the liver or spleen may exist without abolishing the shadow, but a very

large accumulation of ascitic fluid may render it invisible. The diaphragm-shadow seems to render unnecessary the use of the X-rays in the investigation of diaphragmatic movements.

Extraordinary Case of Aortic Aneurysm. Carl Beck reports, under this heading, (*New York Medical Journal*, April 15) with skiagrams, a case of aortic aneurysm of five years' standing, so enormous that it extended over the sternum, the sternal portions of the clavicles and the whole anterior surface of the neck, the diameter of the latter portion being $7\frac{1}{2}$ inches. After two months of Barwell's diet and gelatin injections, the tumor was certainly decreased in size and the subjective condition of the patient is much improved. In giving these injections (every fourth day) the writer employs 5 grams of white gelatin, suspended in 200 c.c., sterilized 7 to 1,000 sodium chloride solution, warmed to 98° F., and forced into the connective tissue in the immediate vicinity of the tumor by means of a large Collin's aspiration apparatus.

Distinction Between Extraperitoneal and Intraperitoneal Exudates. In the course of a valuable series of papers on "The Differential Diagnosis of Pelvic and Abdominal Diseases in the Female," (*Medical News*, April) Munde lays stress upon the following points of difference: Extraperitoneal pelvic exudates are always immovable and are situated low down, usually on either side of the cervix; if in the median line, behind or in front, they extend below the level of the external os. No large extraperitoneal exudate is even found directly behind the uterus. Intraperitoneal exudates inclosing the ovary and tube on one or both sides scarcely ever reach as low in the pelvic cavity as the level of the external os; they are lateral and slightly movable up and down on bimanual pressure (the whole vaginal vault and broad ligament moving with the mass), unless situated in the median

line. The displaced uterus itself is always slightly movable up and down, but not laterally, in intraperitoneal exudates; on the other hand, it is always as immobile as the exudate in extraperitoneal cases.

Brain Weight. The average weight of the adult human brain, according to Quain, is 1,247 grams for the female and 1,400 for the males. That mental power is not necessarily associated with a large and heavy brain is shown by the following examples, quoted by Wm. C. Krauss (*Cleveland Journal of Medicine*, April): Gambetta, 1,180; Dante, 1,320; Liebig, 1,352 grains. On the other hand, take the brain weight of a bricklayer, who could neither read nor write—1,900 grains—which excelled that of Bismarck by more than an ounce.

Hysterical Pains. We have read with much interest the first part of the important contribution by Richard Lomer on "The Diagnostic Value of Pain in Gynecology," in the April number of the *American Journal of Obstetrics and Diseases of Women and Children*. He relates very candidly the histories of many patients who suffered from pelvic and abdominal pains, which were not benefitted by operative measures, but which yielded almost immediately to antihysterical treatment. He has found that a large proportion of these patients are troubled with latent or "normal" hysteria; they offer no impression of their ailment, and only a thorough search for hysterical stigmata will discover the true cause of their suffering. Among the most characteristic stigmata are zones of hyperesthesia of the skin, of the abdomen particularly, shown by pinching up a fold of the skin; anesthetic and analgesic areas, particularly of the conjunctivae and pharynx; and the marked effect that psychical excitement exerts in provoking and aggravating these pains. Dysmenorrhea is noted in nearly every instance, and the pain frequently continues when the flow is abundant. Con-

stipation is a very common accompaniment, and may be ascribed, perhaps, to painful expulsion depending on the surface hyperesthesia. As to the location of the pains, they are most frequently in the right or left lower half of the abdomen, but we also often meet with epigastralgia, pleuralgia, sacral rachialgia, sciatica, coccygodynia, migraine, etc.

The treatment of these cases, says the author, is often remarkably satisfactory, inasmuch as a cure of a very chronic morbid condition may be effected in a very short time. First in importance he places psychical influence, or "suggestion," and to get the full benefits from this agency the physician himself must have and show full confidence of a cure. Next in efficiency comes the use of the constant current, 3 to 6 milliamperes, with anode over the hyperesthetic zones. Since anemia and chlorosis form a fertile field for the development of hysteria, Bland's pill should be taken persistently for four months, and after an interval as long again. Valerian and asafetida are of service in convulsive types. Narcotics have but little effect upon hysterical pains, and all alcoholics should be forbidden. It is important to remove the patient from too sympathetic surroundings and to divert her attention from herself as much as possible.

Treatment of Nerve Syphilis. All authorities concur in the use of mercury and potassium iodide, but do not agree so well upon the matter of dosage.

One should give enough, no doubt, but what is "enough?" Dr. Hugh T. Patrick (*Hot Springs Medical Journal*, April) answers the question as follows: "At first mercury to touch the gums, while the mouth is kept immaculate, and continuance of a dose just short of this. Usually 120 grains of potassium iodide, t.i.d.; sometimes 60 grains suffice, sometimes 120 are not enough. The question will at once arise: How make patients tolerate this dose? Give it always diluted in at least eight ounces of water and after

meals. Occasionally it will be necessary to give it in a pint of water, one-half to be taken immediately after eating, and the remainder an hour later. Given in this way I have had only one patient in more than four years who could not take as much iodide as I chose to give, and in syphilis or suspected syphilis of the nervous system, I have never given less than 3 drachms a day, generally 6, sometimes more. In conclusion, I may add that I have never seen the utility of beginning with 5 grains and wasting three or four weeks of valuable time in working up to a full dose. To begin at once with 30 or 40 grains is just as easy and much more rational. Syphilis of the nervous system is a dangerous malady. When a man sets out to kill a serpent with a club, he does not begin by castigating it with a club."

Pain of Oophoritis. The pain in this complaint nearly always radiates from the groin toward the lumbar vertebrae and along the obturator nerve at the front of the thigh to the knee. In addition to local massage to liberate the fixed ovary, Ziegenspeck recommends the following gymnastic procedure for its freeing action upon the obturator nerve: The patient stands arms akimbo, with painful lower limb stretched backward as far as possible, the toes resting upon a low foot-stool. While in this position, the woman makes about ten genuflexions as far as she can, raising herself each time. This manœuvre is repeated morning and evening, gradually increasing the distance and height of the foot-stool.

Gymnastic Treatment of Sciatica. The Stockholm method, as described by Ziegenspeck, is as follows: The afflicted patient stands in front of an inclined plane, which is a long beam with indentations about half a meter apart, that serve as a support for the heel. The patient lifts her foot until pain ensues, and supports the heel in the notch suitable

for the severity of the pain and sensitiveness. She now bends the upper part of the body forward as much as possible, with the arms akimbo, and rotates it about ten times to the right and to the left. She lifts the foot up to the next notch and performs rotation as before, until pain warns her to be cautious. The sciatic nerve is stretched across the neck of the femur on the same principle as the nerve-stretching after Nussbaum.

Camphor Injections in Pulmonary Tuberculosis. B. Alexander (quoted in *Journal of Tuberculosis*) has found injections of camphorated oil, 1:10, of great benefit in all stages of phthisis, being as generally efficacious in this disease as digitalis in heart disease. When the patient has fever he is given daily injections of .1 to .2 c.c. for four to six weeks, when the treatment is intermitted for a week or more and then resumed. When the patient has become free from fever, doses of .3 to .5 c.c. are given for a week or two, with intermissions of the same period. Finally the intervals between the injections are gradually increased in length and frequency.

Antifermentatives. Murrell (*Pacific Medical Journal*) recommends as the best the oil of cajeput, three drops frequently on a piece of sugar or crumb of bread. Glycerin is also an excellent remedy, a teaspoonful in a glass of water, flavored with lemon juice. A useful combination consists of one-half dram each of boroglyceride, glycerin and syrup of lemon, one-fourth dram chloroform spirit and water to make an ounce. Potassium dichromate, one-twelfth to one-sixth grain, three times a day, fasting, will often remove in a short time the entire group of dyspeptic symptoms, particularly anorexia, pain, nausea, vomiting and gastric tenderness.

EDITORIAL ITEMS.

Corneal Ulcers.—Eczematous ulcers, says Haab, are distinctly round, while those of herpes are quite irregular and map-like.

Fissures of the Hands.—*Pediatrics* prescribes $\frac{1}{2}$ gram each of menthol and salol, a gram of olive oil, and enough lanolin to make 100 grams.

The Jeffersonian.—The undergraduates of Jefferson Medical College have commenced the publication of a creditable monthly under this name.

American and German Physicians.—The *Clinical Review* states that there are five times as many physicians in the United States as in the entire German Empire.

Syphilitic Bone Pains.—Devergie (quoted in *Medical News*) prescribes a pill, morning and evening, of a sixth grain extract of aconite, with a grain of powdered licorice and sufficient extract of licorice.

Sore Throat of Scarlet Fever.—Traube's method consists in the daily injection into the tissues of the tonsils and soft palate of one c.c. of 3 per cent. carbolic acid solution, distributed by a number of punctures.

Influenzal Bronchitis.—For bronchitis, with copious expectoration during grip, Lyon (*Medical News*) prescribes three to five pills a day, each containing 4 grains of terpin hydrate in sufficient glycerin and simple syrup.

Chronic Intestinal Indigestion.—Colicky pain coming on shortly after eating, in older infants or children suffering from this condition, is promptly relieved by small, well diluted doses of liquor potassii arsenitis, says Philip F. Barbour in *Pediatrics*.

Persistent Reflex Vomiting.—The application of ice-cold compresses, frequently changed, to the epigastrium, is recommended as having proved highly efficient in a number of cases by Wm. F. Mitchell (*Virginia Medical Semi-Monthly*, April 14).

Medical Debates.—This is the title of the new official representative of the American Health Resort Association, whose "object is to ascertain reliable facts about climates, health resorts and mineral waters for the guidance of the medical profession in America and Europe." It is published monthly for \$1 per year, by W. A. Chatterton, 133 William Street, New York. Dr. Wm. B. Clarke is the editor.

Acute Conjunctivitis.—Blake affirms (*Medical Record*) that the most efficient treatment is to expose the eye for fifteen minutes every two hours to a carbolyzed spray, produced by the steam atomizer, with a 5 per cent. solution of carbolic acid in the cup.

Throat Treatment of Chronic Ear Disease.—Dr. A. H. Harriman (*Medical Times*, May) supplements the local treatment of the middle ear and Eustachian catheterization by spraying the throat once daily with ferric alum solution, 7 or 8 grains to the ounce of water.

The Bacillus of Syphilis.—Van Niessen claims to have discovered the specific micro-organism, a short streptobacillus, in the blood and tissues of syphilitic patients in the secondary stage of the disease. Injections of cultures of this bacillus into rabbits produced the characteristic lesions.

Enuresis of Children.—*Rhus aromatica* has for some years ranked high among medicinal remedies for this complaint. A convenient formula, recommended by Freyberger, consists of 10 minims of the fluid extract of this drug, with 20 minims aromatic syrup and a half dram of distilled water, three times a day.

The Maryland Medical Journal.—The issue of April 29th is a souvenir number, commemorating the centennial anniversary of the Medical and Chirurgical Faculty of Maryland. It is embellished with a large number of portraits and other engravings of historical value, and is altogether worthy of preservation.

"Growing Pains."—D. S. Hanson (*Cincinnati Lancet-Clinic*, April 22) contends that these obscure muscular pains are nearly always a result of intestinal sepsis. He recommends, therefore, the use of guaiacol or guaiacol carbonate with a vegetable tonic, laxatives if necessary and correction of hygienic conditions.

Uric Acid Headaches.—Haig advises a diet of milk, cheese, pulses, cereal foods and fruit, with exclusion of fish, meat, eggs, tea, coffee and cocoa. For the increase of headache, which is to be expected at the beginning of this treatment, a mixture of ammonium bromide and ammonium salicylate is recommended.

Senile Neuralgia.—In the violent trigeminal neuralgic pains of old persons, with atheroma and high arterial tension, very great good can often be accomplished, asserts Hare (*Therapeutic Gazette*, April 15) by the use of full doses of nitro-glycerin administered simultaneously with full doses of strychnine or nux vomica.

Eustachian Cough.—From experiments with the celluloid eustachian bougies, J. J. Richardson (*Dietetic and Hygienic Gazette*) concludes that there are not infrequently hyperesthetic areas in the eustachian tubes, which, when irritated mechanically or by disease, will set up cough the same as those which exist in the nose or larynx.

The Journal of Tuberculosis.—This is a new quarterly magazine, specially devoted to the prevention and cure of tuberculosis. It is edited by Karl Von Ruck, and is published by A. H. McQuilkin, at Asheville, N. C., for \$1 per annum. The enterprise is a laudable one, and we judge from the first number that it will likewise be successful.

Treatment of Exophthalmic Goitre.—Dercum (*Medical Herald*, March) lets the cardiac symptoms alone and "strikes at the root of the disease," by diminishing glandular activity through the use of glycerophosphate of sodium or calcium, 20 grains three times a day, given diluted with water after meals. He also prohibits meat, coffee, and other stimulating foods and drinks, and prescribes a milk diet largely.

Massage of Tonsils.—This procedure is recommended by Kantrowicz (quoted in *Dietetic and Hygienic Gazette*) for hypertrophied tonsils, the worst cases of which he claims to reduce to normal in about fourteen sittings. "He introduces his forefinger, protected by a rubber cot, as far as possible behind the tonsil and rubs fifteen or twenty times with his finger around it, and then up and down the same number of times."

The Relief of Non-Inflammatory Pelvic Pains.—Geo. Halley (*Journal American Medical Association*) concludes that cystic ovary and pampiniform varicosities are common causes of this symptom. In the former the ovary is tender and pain is increased at the menstrual periods. If the pain is due to the latter cause it is likely to continue after ovariectomy has been performed; ligation and resection of the varicocele is the curative treatment.

ITEMS FROM THE CONVENTION.

Medical College Resolution.—Was voted to be unconstitutional.

Registration.—June meeting of the American Medical Association, 1,700.

Atlantic City.—Next place of meeting of the American Medical Association will be Atlantic City.

President.—W. W. Keen, M.D., Philadelphia, Pa., was elected President of the American Medical Association.

American Medical Editors' Association.—Dr. I. N. Love was elected President of the American Medical Editors' Association. A large attendance; more than 100 editors present.

BOOKS.

The Anatomy of the Central Nervous System of Man and of Vertebrates in General.—By Prof. Ludwig Edinger, M.D., Frankfort-on-the-Main. Translated from the Fifth German Edition, by Winfield S. Hall, Ph.D., M.D., Professor of Physiology in the Northwestern Medical School, Chicago; Assisted by Philo Leon Holland, M.D., Instructor in Clinical Neurology in the Northwestern University Medical School, Chicago; and Edward P. Carleton, B.S., Demonstrator of Histologic Neurology in the Northwestern University Medical School, Chicago. Illustrated with 258 Engravings. $6\frac{1}{2} \times 9\frac{1}{2}$ inches. Pages xi-446. Extra Cloth, \$3.00. The F. A. Davis Co., Publishers, 1914-16 Cherry St., Philadelphia.

The comparative morphology of the central nervous system is a subject of intense interest to scientific physicians in particular and to all students of biology and psychology in general. Prof. Edinger is almost a pioneer in this field, and his unique work is fully appreciated in his native country. The contents of the present comprehensive edition is in three parts and twenty-five chapters. The first part is introductory and affords the best and latest insight into the fundamental conceptions of neurons and their functions. The second part is a review of the embryology and the comparative anatomy of the vertebrate brain. The third, and principal part, treats of the special anatomy of the mammalian brain, with special consideration of the human brain. The publishers have been very liberal in the matter of illustrations. The book is provided with an index of authors, and an excellent general index and index of comparative neurology.

The Principles of Bacteriology.—A Practical Manual for Students and Physicians. By A. C. Abbott, M.D., Professor of Hygiene and Director of the Laboratory of Hygiene, University of Pennsylvania, Philadelphia. New (5th) Edition, Enlarged and Thoroughly Revised. Handsome 12mo; 585 pages; 109 Illustrations, of which 26 are Colored. Cloth, \$2.75, net. Philadelphia and New York, Lea Brothers & Co.

This compact work has passed into five editions within a little more than seven years. It is eminently practical and helpful, as we know by personal use of it. The subject is developed from the beginning by the aid of numerous experiments, and each step is explained fully, yet concisely. The text has been materially extended to cover the advances of the past two years, particularly in the chapters on technique, disinfection, immunity and the specific infections. The colored plates (of which a number are new additions)

are among the best anywhere published, and indeed have been copied largely in other works. The book is one that every medical student would do well to possess.

Practical Materia Medica for Nurses.—By Emily A. M. Stone, Late Head Nurse, Mercy Hospital, Chicago; Late Superintendent of Training School for Nurses, Carney Hospital, South Boston, Mass. Twelvemo; 306 pages. Price, \$1.50 net. Philadelphia: W. B. Saunders, 925 Walnut Street. 1899.

This is a practical book for nurses, by one who is herself a practical nurse. It is clearly written, well printed and neatly bound. The first part of the text is taken up with general considerations and the classification of drugs. The second and major part describes in alphabetic order the preparations, actions, usage and dosage of the members of materia medica, including the latest additions. The appendix contains much useful matter on poisons and their antidotes, emetics, mineral waters and weights and measures, as also a well arranged dose-list and other tables and a good glossary of the principal terms used in materia medica and therapeutics, together with a miscellaneous list of the newest drugs.

Saunders' Medical Hand Atlases.—Atlas of the External Diseases of the Eye, Including a Brief Treatise on the Pathology and Treatment.—By Prof. Dr. O. Haab, of Zurich. Authorized Translation from the German. Edited by G. E. de Schweinitz, A.M., M.D., Professor of Ophthalmology in the Jefferson Medical College, Philadelphia. With 76 Colored Plates and 6 Engravings. Price, \$3.00 net. Philadelphia: W. B. Saunders, 925 Walnut Street. 1899.

This latest volume forms an excellent companion-book to the "Atlas of Ophthalmoscopy and Ophthalmoscopic Diagnosis," by the same noted clinician. The plates have been painted from nature and portray all the common and some infrequent external affections of the eye. The text is necessarily brief, but very comprehensive. Especial emphasis is laid upon methods of examination and antiseptic non-operative treatment. The editor has made free with interpolations. The work is one of the most beautiful of an exceptionally successful series, and needs only to be seen to commend itself.

An Epitome of the History of Medicine.—By Roswell Park, A.M., M.D., Professor of Surgery in the Medical Department of the University of Buffalo, etc. Second Edition, Illustrated with Potraits and Other Engravings. 6½ x 9½ inches. Pages xiv—370. Extra Cloth, \$2.00 net. The F. A. Davis Co., Publishers, 1914-1916 Cherry Street, Philadelphia. 1899.

The first edition of this work was published about a year ago and was based upon a series of lectures delivered in the University of Buffalo, the first course of the kind ever given in this country.

The contents embrace a succinct and highly entertaining account of the progress of medical science in all ages and climes, from Esculapius to Lord Lister. The relationship between medicine and the other arts and sciences, particularly theology, are portrayed with graphic fidelity. The text is embellished with a large number of authentic portraits of ancient and recent physicians and surgeons, and is further illustrated with reproductions of old-time instruments and operations. The present edition has a historico-critical supplement on iatrotheurgic symbolism, which is an able and timely dissection of medico-christian symbols. The chief value of such a work as this is in its lessons of the errors of the past, teaching us what not to do. It also inculcates in the medical reader a broader view of his profession and its world-wide associations. There is none who might not combine profit with recreation by its perusal.

Massage Treatment in Diseases of Women, for Practitioners.—By Dr. Rob Ziegenspeck, Professor of Gynecology and Obstetrics at the University of Munich. Authorized Translation, by Dr. F. H. Westerschulte, Attending Physician of the Norwegian Lutheran Deaconess' Hospital. With Seventeen Illustrations. Price \$2.50. Published by the Translator, 684 West Ninth Avenue, Chicago. 1898.

The Thure Brandt pelvic massage and stretching treatment of the more chronic "female complaints" has earned for itself a distinct and distinguished place in modern therapy. The author of this volume has divested the treatment of all useless accessories. He enters very fully into the causes of displacements and the inflammatory lesions and explains the reason for each step of the remedial mechanical procedures. He also compares the indications and applications of competitive methods of treatment. The translation is very literal. The book is one which every physician who treats diseases of women would do well to possess.

Materia Medica and Therapeutics.—An Introduction to the Rational Treatment of Disease, for the use of Students and Practitioners of Medicine.—By J. Mitchell Bruce, M.D., F.R.C.P., etc., Physician and Lecturer on Medicine at Charing Cross Hospital, London. New (Sixth) Edition, Revised and Enlarged. In One 12mo. Volume of 618 pages. Cloth, \$1.50, net. Lea Brothers & Co., Philadelphia and New York. 1899.

This compact little volume is, considering size, the most rational, intelligible and agreeable presentation of the subject we have yet seen and read. Materia medica is presented systematically and in a way that greatly assists the memory. The chemical and pharmaceutical relations of individual drugs are detailed at greater length in the present edition. The special value of the book, however, lies in that part of it devoted to general therapeutics, in which

the author describes the physiologic and pathologic relations, the pharmacodynamics, natural recovery and differential therapeutics of the disorders of the various functions and organs. A useful synopsis of allied drugs accompanies each chapter. The revision has brought the work up to the level of our latest knowledge.

A Text Book of Mental Diseases, with Special Reference to the Pathological Aspects of Insanity.—By W. Bevan Lewis, L.R.C.P., (Lond.), M.R.C.S., (Eng.), Medical Director, West Riding Asylum, Wakefield; Lecturer on Mental Diseases at the Yorkshire College; Examiner in Mental Disease to the Victoria University. Second Edition, Thoroughly Revised, Enlarged and in Part Rewritten. With Illustrations in the Text, Charts and Twenty-six Lithographed Plates. Octavo; 609 pages. Price, \$7.00. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. 1899.

It is difficult to do justice to this able, scholarly and altogether admirable work. Suffice it to say, that, to the best of our knowledge, it takes first rank in the modern literature of mental disease. The author's special object has been to show the relation between morbid changes in the brain and disorders of the mind—in other words, to explain the physical basis of psychical abnormalities. That he has succeeded in this attempt almost beyond expectation, thanks largely to the new methods of Golgi, one needs only to compare the older text-books with this to demonstrate their great difference in accurate scientific value. The text is divided into three parts. The first, or anatomical and histological section, comprises a thorough exposition of the "ground-plan and superstructure of the nervous system," with special emphasis upon the cortical envelope—"the structure, nature and anatomy of the nerve-cell." The clinical section, including more than half the contents of the volume, is a most graphic, yet judicial, exposition of all forms of mental disease, founded upon a solid experience with something over 4,000 cases of insanity. The author, in addition to general considerations, gives a full account of the pathology of general paralysis, epilepsy, and chronic alcoholism. He lays particular emphasis upon the lymph-connective system of the brain and the "scavenger-cells" of insanity. The plates are in the highest degree beautiful, and, no doubt, accurate representations of the microscopic appearances in neurohistology and neuropathology.

SELECTIONS.

Sanmetto and Substitutes.—"I have used Sanmetto, also substitutes, but must say Sanmetto is the only remedy where it is indicated. It is all claimed for it. I use it every day.—G. A. Smith, M.D., Henton, Ill.

Chemical food is a mixture of phosphoric acid and phosphates, the value of which physicians seem to have lost sight of to some extent in the past few years. The Robinson-Pettet Co., to whose advertisement (on page 3) we refer our readers, have placed on the market a much improved form of this compound, "Robinson's Phosphoric Elixir." Its superiority consists in its uniform composition and high degree of palatability.

We wish to call the attention of our readers to the superior merits of the Patent Adjustable Double Slip Socket Artificial Leg, as manufactured by the Winkley Company, of Minneapolis, Minn., now the largest establishment of its kind. With this leg, a perfect fit can be secured without the patient leaving home. Their large 1899 catalogue, giving full information, will be sent free upon application by mentioning our journal.

Grip and Its Allies.—The prevalence of grip and pulmonary troubles leads us to call special attention to the value of Blennostasine in treating these affections. When this remedy is given in the earliest stage of grip, the attack is usually aborted, and in any case its duration is cut remarkably short. Blennostasine relieves the excessive mucous discharge in a few hours, and also the headache which frequently accompanies colds of the influenzal type. Its antifebrile action is particularly valuable in severe cases of grip, and it is free from the toxic character of belladonna and the synthetic drugs.

Puerperal Insanity.—Dr. J. A. Reagan (*Charlotte Medical Journal*, March, 1899) states that in the treatment of puerperal insanity simple and rational means should guide the physician. Any defect in any of the organs should be regulated, and the patient should be taken from her home as soon as possible, and her mind directed to strange surroundings and people. It must be remembered that from the beginning the general health is below normal. Owing to the loss of sleep, the nervous system is impaired, and the digestive powers much weakened, and therefore the most easily digestible food should be given. Iron and strychnine are also advisable in most cases. As it is difficult at times to induce the patient to take medicine, they fail to obtain the proper amount of sleep. Different

patients require different hypnotics. Some bear chloral hydrate well, while it has no effect on others. In Dr. Reagan's opinion the majority of patients are more easily affected and sleep better if given from 15 to 30 grains of Trional, repeated in three or four hours if necessary, than from other hypnotics. No force should be used, as good judgment will easily accomplish more than the latter. It is also important to wean the child, and use means to dry up the milk as speedily as possible.

When Pain is Dominant.—"A number of years ago, in a conversation with my old friend, Prof. Stucky, of Louisville, he told me that he used far less morphine now than formerly and that he was able to combat the factor of pain as successfully in the majority of cases without it as he did with it. He urged me to give Antikamnia to my patients who had neuralgia, la grippe, rheumatism, locomotor ataxia and dysmenorrhoea, instead of using morphine. I acted on his suggestion and have been able to relieve this class of patients as effectively and without producing the evils that result from the exhibition of opium or its alkaloids. Antikamnia possesses anodyne, antipyretic and analgesic virtues and has been thoroughly tried by able therapists. Prof. Shoemaker, of Philadelphia, has found it very valuable in rheumatism, migraine or neuralgic headache and many other nervous affections."

The Management of Patients Before and After Laparotomy.—In the course of an interesting and practical paper, with the above title, read before the New York Medico-Surgical Society, by Dr. Frederick Holme Wiggin, Visiting Gynecologist to the City Hospital; Surgeon to St. Elizabeth's Hospital, it is advised: "If the operation is to be performed at an early morning hour (i.e., 8 a. m.), the patient should be given a peptonized milk punch at 11 o'clock the previous evening, and if he awakens at 5 or 6 a. m. one ounce of Liquid Peptonoids may be given, but nothing more. It has been the writer's experience that a small amount (one ounce) of stimulating and concentrated food, administered about two hours prior to the taking of the anaesthetic, diminishes the liability to heart failure, and also lessens the nausea and vomiting which frequently follow the return to consciousness. If an afternoon hour has been decided upon, another peptonized milk punch may be given the patient when he awakes, and one ounce of Liquid Peptonoids at 11 a. m." In considering the after-treatment, the distinguished author says: "With the passing of these first twelve or eighteen hours, if the patient is not suffering from nausea or vomiting, and the pulse rate is much the same as before the operation, a drachm of Liquid Peptonoids or of some other similar preparation may be given, and repeated, if well borne, every twenty minutes until four doses have been taken, when, after an interval of two hours, a small quantity

of equal parts of milk and lime water or of peptonized milk may be given from time to time, until four ounces have been taken. After this there should be an interval of two hours and then half an ounce of Liquid Peptonoids may be administered."

Familiar Clinical Picture.—One of the most common class of cases is that in which there are no well defined characteristic symptoms of organic disease, but in which there are disturbances of practically all the functions of the body. This condition is variously termed general debility, malnutrition, general atony, etc. The symptom-group is an exceedingly complex and varied one, but the most striking disturbances are those connected with the processes of metabolism; the patient is unable to replace by food the active waste occasioned by the physiologic functions. In consequence of this, nutrition suffers, vital force becomes diminished and there is functional disturbance of practically all the organs of the body. The stomach and the processes of digestion become particularly enfeebled and as a consequence there arise the symptoms of atonic dyspepsia, with lack of appetite and inability of the digestive organs to prepare the food for assimilation. The patient's vital powers are at a low ebb and nature's method of recuperation, that is, by assimilation of food, is effectually inhibited by inability of the organs to furnish the required properly prepared nourishment. Every physician has many times realized the absolute uselessness in these cases of the ordinarily employed tonics, iron, arsenic and strychnine. It is soon apparent that the remedies are either not absorbed or if they do enter the system, they fail absolutely to re-establish the proper ratio of metabolic waste and repair. It is now universally conceded by authorities that the first requisite in the treatment of this class of cases is to foster the patient's nutritive functions so that food will become assimilated and thus restore wasted tissue and impaired vital forces. The stomach is the organ of prime importance and its normal functional activity must be re-established by remedies which have a direct tonic alterative and stimulant influence upon its enfeebled, inactive mucous membrane. Stomachics—gentian, taraxacum, phosphoric acid, etc.—are the agents of most service. When, however, these stomachics are combined in a certain manner with a remedy which, according to the highest medical authorities, is the best promotor of assimilation, the indications for treatment are completely met. Gray's Glycerine Tonic Comp. combats malnutrition upon the most rational scientific basis, that is, it re-establishes normal nutritive processes by its stimulant and alterative influence upon the digestive organs and also furnishes the wherewithal—glycerine—to cause the assimilation of food and medicines. It gives nature the needed chance to resume its normal work of repairing exhausted vitality and wasted tissue. While primarily a stomachic Gray's Glycerine Tonic Comp. is of greatest value in all conditions of systemic depression or exhaustion occurring either independently or as a consequence of severe organic diseases, such as tuberculosis, Bright's disease, etc. It antagonizes depression by propping the natural functions of the body, by engendering appetite and ensuring the absorption and assimilation of food—nature's method of repairing waste.

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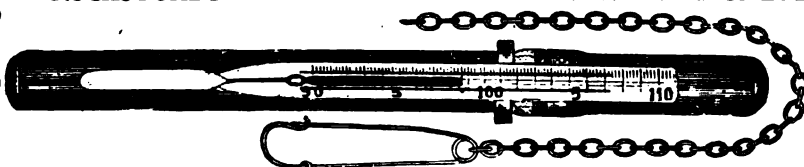
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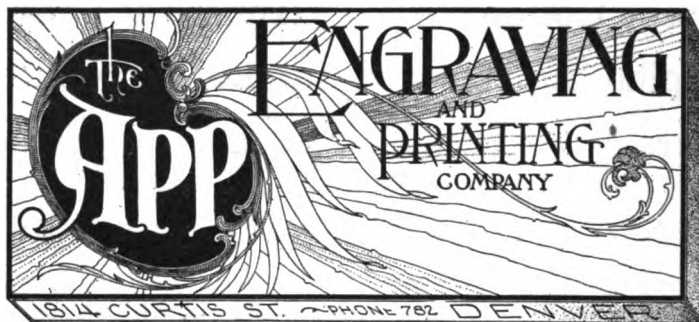
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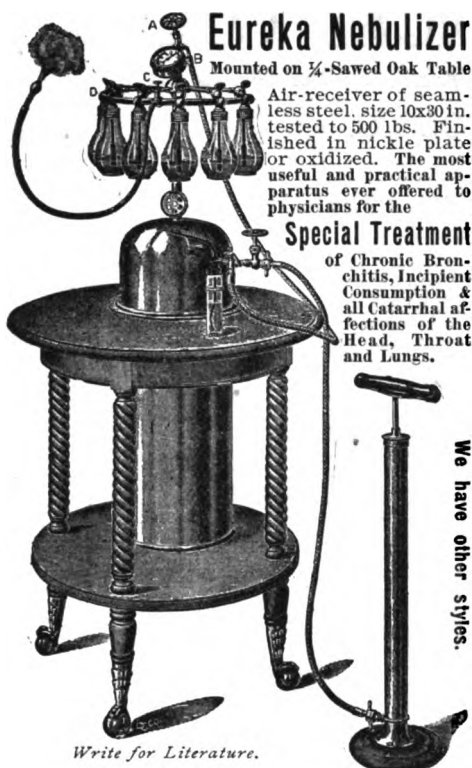
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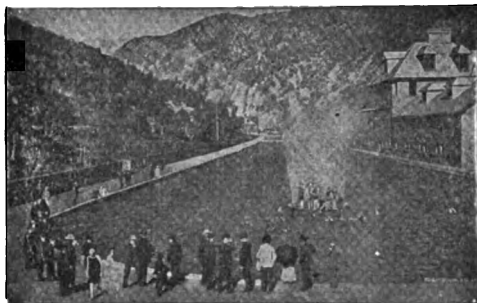
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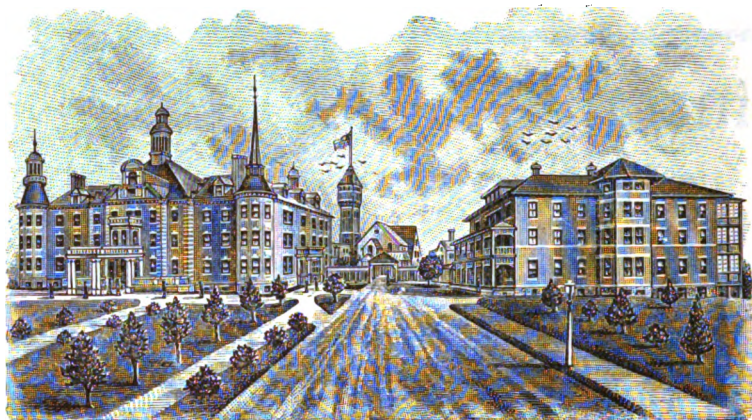
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